EDUCATION REFORM IN OMAN 1970 – 2001:
The Changing Roles of
Teachers and Principals in Secondary Schools

YAHYA AL –MANTHRI

Ph.D.
The University of Edinburgh
2001

Abstract

Since 1970, when Sultan Qaboos came to power, Oman has developed an educational system which owes its origins to an Islamic curriculum and which, like many other Arab countries, has been characterized as having a centralized, hierarchical leadership, initially, schools teachers and principals were predominantly expatriates from other Arabic-speaking countries, although this has been changing rapidly. The educational system was rigid, with few opportunities for Omani children to develop self-learning strategies or for schools to teach subjects, which meet the demand for globally, competitive skills and competencies.

Educational policies introduced since 1995, and reflecting these global economic pressures, make it imperative that Oman's schooling system is reformed. Thus a major reform program was introduced which aimed to bring changes to the curriculum with new subjects (life skills, English, ICT) and more child-centered, interactive styles of teaching and learning. Consequently, school teachers and principals are expected to implement the changed content of the curriculum and practices in administration. This is no easy task and the thesis addresses the problems faced in implementation.

Chapter one examines the literature on globalization and draws attention to its impact on the education system of Oman, whilst chapter two teases out the impact on the curriculum in particular. Through a critical review of curriculum theory, and the relevance to Oman, it becomes clear that there are real problems in the rapid implementation of curriculum reform. Through an historical account of the development of Oman's educational system, in chapter three, the phases of this implementation are explored in detail. It becomes apparent that appropriated leadership, at the level of the school principal and school teacher, is crucial for the success of these current educational innovations. Chapter four, therefore, delineates the various approaches to educational administration and leadership and argues that collegial, moral leadership is most appropriate for efficacious implementation of the reforms. Whether such leadership exists, or indeed can be encouraged to exist, is the substance of this research. Chapter five outlines the methods used in the search of an understanding of the role of leadership in the current curriculum reform. In chapter six the findings are reported and discussed. It is clear that there are possibilities and opportunities for further development of collegial, moral, leadership. Chapter seven accepts that education reforms must be seen within the framework of wider socio-political reforms. Responses to the pressures of globalization may well require more than just curriculum change. Finally, an examination of the sustained commitment to hierarchy and concerns for language, identity and culture may have to be addressed.

Acknowledgements

I wish to acknowledge my thanks and gratitude to my supervisors Professor Kenneth King and Dr. Gari Donn for their encouragement and guidance.

I would like to thank Ministry of Education in Oman for supporting the study, thank goes to all principals and teachers who answered all my queries while I was carrying out my fieldwork. My thanks go to Dr. Mohammed Al-Bandari and Mrs. Nassra Al-Riyami for their valuable assistance in my fieldwork.

I also wish to acknowledge the staff of the faculty of education, University of Edinburgh I am grateful for Chris Martin for his generous assistance.

Last but certainly not least I would like to thank my family (wife, children) and friends for their support and encouragement.

TABLE OF CONTENTS

Definition of Terms

For the purpose of this present study, the following definitions were used:

Accountability: Responsible, reciprocal behavior by each organizational component (individual, group or entire organization) to assume responsibility for its own performance and that performance's contribution to the overall successful performance of the organization and the ability of each organizational unit to support and monitor each other's performance (Covey, 1990).

Collaboration: Working jointly with others toward a common goal or purpose (A New Compact for Learning.

Culture: The basic assumptions and beliefs that are shared by organizational members, operate unconsciously, and define the essence of the group. These assumptions and beliefs are learned responses to external and internal problems that have worked consistently for the members of the group and that are taught to new members as the correct way to perceive, think about, and feel in relation to those problems (adapted from Schein, 1985).

Culture (Organizational): A cohesive, shared set of values, purposes and meanings that constitute how relationships and work are constructed and performed and the transmission of this knowledge and practices to new members.

Facilitative leadership: "The behaviors that enhance the collective ability of a school to adapt, solve problems and improve performance" (Conley & Goldman, 1994:4).

Instructional leadership: Incorporates "defining the school's instructional mission, managing curri-culum and instruction, promoting a positive learning climate, observing and improving instruction and assessing the instructional program" (Smith & Piele, 1997:258).

Leadership: A relationship influence among leaders and followers who intend real changes that reflect their mutual purposes (Rost, 1991:102).

Principal/Headmaster: A school's chief administrator certified in administration and supervision and responsible for the overall operation of a school.

Reform and Development of General Education (1995) (RDGE): A national plan to improve general education (ten years of basic and two years of secondary), establish high standards for learning, implement

curriculum and instruction innovations and implement central administration reforms in the Ministries of Education and Higher Education.

Responsibility: "An internal commitment of self-improvement, the improvement of others around us, and the school community at large" (Lambert, 1998:95). (Note: Although this definition is similar to Covey's definition of accountability, Lambert differentiates between responsibility and accountability. To Lambert, accountability is interpreted as standards or conditions usually imposed by an external authority to which members conform. Accountability measures may mitigate against the development of responsibility resulting in compliance, resistance, or an attitude of victimization rather than proactive participation (Lambert, 1998:95).

Restructuring: A substantive, systemic change in the rules, roles and relationships of all those who work in or are served by the organization for the purpose of improving results for students.

School: Socially organized group of individuals with a shared set of values, purposes and meanings based on relationships and interdependencies that create bonds that unite its members (Sergiovanni, 1994).

Teachers: Trained instructors who are employed as full-time regular classroom teachers.

20:20 Vision: A comprehensive 25-year plan (1995-2020) for the economic and social development of Oman.

Values: Beliefs and/or standards, which are regarded as legitimate and binding, and act as standards by which ends or actions are selected. (Hill and Turner, 1984.)

Vision: "The inclination of a person to see that the world, in this case the school and the associated activities and learning, need not remain as it is – that it is possible for it to be otherwise, and to be better. It is the ability to see how things are and how they might be – not in terms of the ideal, but in terms of what is possible, given a particular school situation" (Greenfield, 1987:61).

Abbreviations

ANOVA	Analysis of Variance
ASCII	American Standard Code for Information Interchange
CIPP	Context, Input, Process, Product
EFA	Education For All
HSD	Honestly Significant Difference
IBRD	International Bank for Reconstruction and Development
GNVQ	General National Vocational Qualifications
NVQ	National Vocational Qualifications
OBE	Outcomes Based Education
ONQ	Oman National Qualifications
RDGE	Reform and Development of General Education
SBC	Standard Based Curriculum
SBE	Standard Basic Education
SD	Standard Deviation
SPSS	Statistical Program for Social Sciences
SQU	Sultan Qaboos University
UNESCO	The United Nations Educational Scientific and Cultural Organization
WTO	World Trade Organization
SD	Standard Deviation

LIST OF TABLES

LIST OF FIGURES

Introduction

This study examines two interrelated components of education reform; namely, curriculum development, design and delivery and educational leadership. It is argued that each contributes to the effectiveness and success of an educational reform.

Through an historical examination of the literature on curriculum design and the literature on leadership, this thesis will develop the argument that Oman's recent curriculum reform is best served by a reappraisal of the framework and methods currently utilised to aid implementation. It will be seen that the importance of efficacious curriculum reform, innovation and implementation lies in Oman's need to position itself favourably in a global society. Further, this thesis will lead to a discussion of recent research and literature that support changes in these two areas.

Curriculum

The twentieth century witnessed the growth and expansion of education in Oman. Initially, education was based on the holy Qur'an and the transmission of Islamic religion and culture. Between 1932 and 1970, educational opportunities were very limited; Oman relied on other countries to provide educational opportunities and students were sent abroad to study. These students outnumbered those who studied in Oman.

In 1970 the government of Oman accepted responsibility for and was committed to building a national Omani educational system. The initial goal was to provide all students with opportunities to obtain an education by building schools and increasing enrolments for 6 to 18 year olds. However, in curricular matters, Oman relied on foreign experts and overseas research to provide a curricular base as well as on expatriates to provide instruction.

During the decades of the 1970s and 1980s many Omanis who had obtained advanced educational training abroad returned to assume high-ranking positions in Government and to take responsibility for their country's future. They realised the critical role of an educational system to a nation's progress, particularly in the development of the nation's human resources. It was evident that improvement in educational quality required the co-ordination of three related spheres of social life – the educational, the economic and the social planning. Preparation of an Omani teaching force to assume responsibility for the education of its citizenry was paramount. Teacher training was expanded and four-year teacher training programmes and institutions were established.

Initially, priority was placed on expanding the educational system and providing access to "education for all". As Oman enters the twenty-first century with the adoption of

the *Reform and Development of General Education (1995)*[1] and the *20:20 Vision plan (1995)*[2], efforts are focused on improving the quality and content of education to ensure that the national education system provides students with the skills and knowledge needed for Omani citizens to be prepared for success in life.

Further, it has been noted that Omanis must also be prepared for the challenges and opportunities that will be presented both domestically and globally. Included in this goal is the improvement of the educational programme so that Omani students exit from education (at secondary, further or higher educational levels) with qualifications equivalent to those achieved by students in advanced and globally competitive countries. As a result "a standards-based curriculum" emphasising mathematics, science, problem solving, critical/analytical thinking skills, independent learning, and computer literacy has been developed (RDGE). These innovative curriculum standards place demands on the Ministry of Education, regional centres, and school personnel. However, it has become apparent that traditional strategies of instruction relying upon transmission of knowledge and recitation of information will not accomplish the new educational goals and objectives nor prepare citizens of Oman to participate in the global economy. In light of these considerations, there has been the development of a cohesive, coherent standards-based educational system which calls for the integration of the many fragmented forms of schooling that have hitherto existed in Oman. It is argued that a new structure of Basic (ten years) and Secondary (two years) education will ensure equality, equity and a solid educational foundation for all Omani citizens before advancing to specialized or advanced studies (RDGE).

Traditionally, schools received imposed and imported curricula often with goals and objectives designed by and for foreign countries. Foreign consultants/experts and researchers were relied upon to improve the educational system/programme and to institute change. To create the changes seen as important for the educational system, Oman's educational leaders now realise that they need to investigate education research more widely as well as consulting with foreign experts and consultants; but that ultimately the changes and improvements must be driven by the Omani educational community. There is now recognition that the Ministry, education regional centres, school principals, and teachers must accept responsibility for initiating change and driving educational innovation and improvement. Indeed, Oman has demonstrated its long-term commitment to developing its resource capacity through the building of a national educational infrastructure. This thesis

---

[1] Throughout this thesis the Reform and Development of General Education (1995) will be known as RDGE.

[2] Throughout this thesis the 20:20 Vision plan (1995) will be known as 20:20 vision.

will indicate how these educational improvements, particularly curriculum reform, are interrelated with economic growth, and as will be indicated in Chapter One, generally, with manpower needs as these provide the social improvements that Oman – like most countries – requires and now advocates. It is the aim of such reforms to aid Oman's entry into the global economic community of the twenty-first century.

However, for national economic policy to promote economic growth that serves national needs, the knowledge and skills developed must be appropriate to a high skill economy. This was the commitment behind the RDGE and the 1995 Reform Policy Paper.

It will be seen that the Reform proposes

1. Central administration reform in the Ministries of Education and Higher Education;
2. Changes to enhance communication between units, promote understanding of reform initiatives, and ensure implementation of reforms;
3. Formation of teams and work groups to implement varied phases of the new curriculum and to train teachers.

The Reform promotes the acquisition of knowledge and skills that rely upon students using problem solving, higher order thinking skills, and technological applications. Teachers and administrators, it is suggested, must be adept practitioners of these skills if they are to teach them to students. Educational systems, like all other economic and social institutions, must have members who can adapt to and work within a constantly changing environment that presents new problems, challenges, and opportunities. Teachers need both knowledge-based expertise and the ability to diagnose and analyse students' approaches to learning in order to guide and facilitate students learning. As teaching and learning become interactive and more complex, teachers must be able to analyse and interpret the learning situation and monitor and adjust lessons to meet students' needs. This requires flexibility and adaptability, which may not be compatible with an approach to curriculum, teaching and learning that is found in strictly structured, packaged instruction, as has often been the case in Oman.

Given these concerns, this thesis will utilise a constructivist perspective of leadership and indicate that school administrators and teachers are best involved in activities that result in learning together whereby meaning and knowledge can be constructed collectively and collaboratively. Redefining leadership within a constructivist perspective places principals and teachers in a situation where they can apply inquiry, higher order thinking and problem solving skills to help in problems and educational situations. These skills would be replicated in classroom situations to address the new curricular content of the 1995 Reform.

It will be seen that leadership becomes central not only to the implementation of the innovation but also to its successful outcomes. In a country such as Oman, measures of educational "success" become important indicators in the drive towards international

comparability in standards as well as student outcomes. These issues will be an integral part of the understanding developed in this thesis. It will show that the adoption of "top-down" initiatives have had negligible effect on student achievement and school improvement generally (Bell, 1993). Indeed, as Lambert (1998) contends, improvement strategies that are dependent upon a single, or few, persons; or outside direction will fail or be unsustainable. This has resonance for administrators and policy makers in Oman, where administrators and staff are accustomed to an external, formal authority and frequently, fail to recognise that leadership lies within the school and within themselves. In Oman, therefore, reform and improvement are not perceived as the responsibility of school administrators or practitioners.

This sense of contestation concerning educational reform is not unique to Oman. Rather, writers draw attention to the experiences noted in many countries where curriculum reform is finding advocates as well as critical appraisal. In South Africa, for example, researchers note that educational policies are seldom implemented as designed (Christie, 1999). Whereas governments may see policy as a total, rational, "package"; teachers and Principals – the implementers – may see policy as part of a process of compromises, trade-offs and settlements. Thus the "problem" with policy implementation may be seen as "unrealistic expectations" by one party and "lack of will" by another.

It will be argued that in Oman, as elsewhere, creating a school community within which collaboration, innovation, and improvement are the norm places new demands on Principals and warrants new strategies for working with schools in a new leadership relationship. A school culture that fosters collaboration among its members cannot be imposed upon teachers, or implemented as if it were a pre-packaged programme (Smith and Scott, 1990). Such a culture relies on the voluntary efforts of school members to work together as a team, constantly focused on the goal of educational improvement. A culture and structure must be developed that

> ... *encourages teachers as professionals to work together and with the principal and other administrators toward school improvement and professional growth.*
> (Smith and Scott, 1990:3)

Creating and maintaining a culture in which collaboration, innovation, and improvement are the norm make inordinate demands on principals. They require principals continually to monitor, assess, and adjust their behaviour and actions to maintain a delicate balance between the need for a coherent focused vision and goals and the flexibility that allows staff commitment, creativity, and leadership to flourish (Conley and Goldman, 1994).

Changing the culture, processes, and subsystems within an educational system, effectively and significantly, requires of principals diverse cognitive skills and knowledge of change, these being related to cultures, human relations as well as to communications. These are not discrete skills but should be interwoven into a system for shared leadership. Shared

leadership requires that principals be able to use processes and strategies, such as communication, group processes, conflict management, and instructional management towards the improvement in policy implementation.

In addition, this thesis will show that teacher leadership and participation in school improvement is believed to be critical. If schools are to improve, school communities have to be able to reflect on their beliefs and actions, make judgments, and create new processes and structures that enhance academic improvement (Maeroff, 1993). It is the interaction of the components that make leadership dynamic. This interaction becomes the unique leadership evidenced by a person, or persons, within a school community.

Therefore, Oman's educational reform initiative (as embodied in the Reform) provides a conceptual framework for an analysis of organisational restructuring and a new leadership imperative. Educational leaders whose leadership authority originates in positional power within an hierarchical structure may come to find themselves in a position where their leadership abilities, skills, and competencies will be challenged by a new collaborative, group-oriented and cultural governance system.

In light of the foregoing, the following problem is addressed in this study: to what extent do Omani principals who are implementing a standards-based curriculum, as defined in the Reform prepared by the Sultanate of Oman, Ministry of Education (1995), exhibit the leadership behaviours that foster the use of collaborative practices within a school culture?

To address this general question, Chapter One will examine the impact of globalisation on education with specific reference to Oman. This will be further analysed within the literature on curriculum reform. In Chapter Two this literature will be delineated and will elaborate the distinctions between behaviourist and constructivist approaches to the curriculum. It will be seen that this thesis adopts a constructivist perspective for a theory of the curriculum, requiring teachers to adjust constantly to students' learning needs. In addition a constructivist approach to curriculum development will necessitate the collaborative efforts of all members of the educational system. Central administrative offices will need to set standards and direction for instruction and evaluation and aid regional and local administrators in interpreting and operationalising national directives. It will be argued that school administrators will need to take an active instructional leadership role working collaboratively with teachers to produce an effective instructional programme (Smith and Piele, 1997). Therefore to achieve this economic growth, educational efficiency and management are important in the global world.

These issues will be discussed further in Chapter Three where, worryingly, it will be seen that current reform efforts have adopted a system approach which does not engage all personnel in the design, planning, construction, innovation, implementation and appraisal of

the curriculum. Due to the disjuncture between policy and its practical implementation, it will be seen that it will be important to engage all members of the educational community in policy implementation and to foster a structure which distributes power, decision making, problem solving and planning to all.

Chapter Four will examine these concerns when theories of leadership are discussed. It is argued that curriculum considerations, along with administration, aid efficacious reforms. Indeed, in Chapter Four, it will be seen that leadership becomes a central concern in this analysis of efficacious implementation of an educational reform. Literature from the field of education administration indicates how crucial this is in the context of globalisation, curriculum and administration. The appropriate channels for efficacious implementation of Basic Education Curriculum are limited. It will be important to discover how the Principals and teachers see their role. It is suggested that through a new style of leadership, it will become possible to implement the new core curriculum, implement new teaching strategies, deal with people individually and in groups, and develop a culture where change and innovation are valued and practised by school personnel. These become the critical factors, which the research methodology addresses in Chapter Five.

Because the key research question concerns the efficacious implementation of a curriculum reform, the research is conducted through questionnaires and semi-structured interviews. Chapter Six will delineate the importance of collaboration in the responsibilities for problem solving, decision making and planning among major stakeholders, Ministry staff, regional directors, administrators, teachers, parents, students and community members. Current education policy-making may require the restructuring of educational organisations from hierarchical to collaborative structures; in these organisations the leadership function may be assumed by different groups or group members for varied lengths of time. This may challenge the leadership abilities of principals. This challenge will be the focus of discussions in Chapter Six. It will be argued that principals may be called upon to exercise management of a different sort and to develop a culture within which diverse groups can operate with a shared sense of meanings and purposes to achieve shared educational and organisational missions and goals. Principals may need new skills or changes in leadership training and may require a variety of perspectives on administration to enable them to define, build and manipulate a culture where this shared commitment, responsibility and relationship can exist.

Finally, in the concluding chapter, Chapter Seven, it will be seen that a conceptual and theoretical examination of transformative and collaborative leadership asserts the importance of both the leader and followers. However, in such a relationship, attention usually is not focused on the role of followers (organisational members) in a shared leadership

relationship, nor whether these individuals see themselves as leaders, change agents, and mutual partners in such relationships. Although empirical research in an educational context is beginning to provide information about collaborative leadership, this thesis clarifies the exceptional importance of all parties understanding the nature and imperatives of collaborative leadership and acting in an appropriate manner.

In light of the foregoing outline concerning the issues and problems associated with the introduction of a new curriculum in Oman, this thesis seeks to address the central role of the administration of both principals and teachers in the efficacious implementation of the 20:20 vision. It will be argued that co-ordination of these activities and achievement of these goals requires a new type of leadership to be exercised by central administrative personnel, regional centre personnel, and school leaders and teachers.

It will be argued that for leadership to be effective in this era of reform, administrators may need to change their perceptions about leadership to provide the impetus for national initiatives, such as the Reform. In such programmes, positional stature and power are not the driving forces of innovation and improvement. Rather the shared vision, values, beliefs and goals become the driving forces that encourage efficacious implementation of the reform programme and encourage support from the members of the schools and those in the educational system. Because of their overriding importance, these visions, values and beliefs must be developed carefully and consensually and be reflected in all actions. Just as the national leaders put careful thought into the documents that contain the beliefs and ideas that guide this nation, schools may be able to achieve excellence by developing and working to achieve what everyone believes is the mission of a school. In Oman, as elsewhere, educational leaders have the responsibility to unite the school members and guide the establishment of this collaborative, cultural framework.

Chapter One

Globalisation – a Challenge to the National Education System

In Oman, as in the rest of the world, education policy has focused on curriculum development, design, and innovation. It has been affected by national policy and by more international economic and social pressures. In recent years those have come to be seen as part of an international process called "globalisation". Globalisation is usually defined as the spread of ideas, policies, and practices across national boundaries (Walker and Dimmock, 2000).

It is important to develop a thorough understanding of the impact of globalisation on education theory before one attempts a review of the literature on a curriculum innovation, design, development and evaluation.

This chapter will delineate further the context within which these realities emerge and exist. It will examine, the role of curriculum in that globalised reality and it will analyse the traditional discourses surrounding curriculum to provide an understanding of the central role the curriculum plays in the emergence of any society from an adherence to traditional practices to social structures and processes which are resonant with the global competitive world.

The most obvious influence of global forces on education is through the changes it makes in labour force demand and, hence, on the demand for education. Lee *et al* (1994) and Gindling *et al* (1995) demonstrate, for example, that the returns to educational investment in Taiwan have changed as global forces have reshaped the economic system there. Higher education investments are becoming good investments in countries where, formerly, it was thought that the best returns were in primary schooling.

This new trend has two root causes. First, previously accepted development theories worked from an assumption that all developing countries were poor with largely uneducated populations. This was never fully true of all developing countries, but the pervasiveness of these characteristics allowed for mainstream development theory to be built around such conditions. Mainstream development theory held that human capital, notably education and health expenditures paid large dividends for both national investments and family investments in, particularly, primary education. Substantial evidence validated this notion. Jamison and Lau (1982) documented that farmer productivity increased with basic education levels. Schultz (1989) summarised the many gains made when women had basic levels of education. The World Bank's 1990 report on poverty brought together the literature to make a substantial point that education was a good investment against the growth of world-wide

poverty (World Bank, 1990). But, many developing countries have advanced beyond basic levels of education. Further, education designed wholly to bring a group of people off the poverty shelf looks very different from education designed to move workers from informal markets into rapidly growing market economies. So, mainstream development theory based on poverty reduction is not fully applicable as a development strategy today.

The second way that global forces affect development through education is by "bidding up" the labour market skills in emerging economies. As each nation begins to move substantial numbers of its population away from subsistence lifestyles into low-skilled global labour jobs, the economics of education for investment within the families means that children are no longer a resource that might be sacrificed for school time – rather they are a burden that must be dealt with while parents go to work. Also, parents earn money in their work that they exchange for food, clothing and other necessities. Although many parents may be poor, the increased access to cash provides them with some means for contributing to the education of their children. If the surrounding economy is growing, parents will often see that investment in their children's education is a good use for their money. Hence, the global forces that brought foreign direct investment into the country and built factories also changed the demand for education and the ability of parents to pay for that education.

Each developing country that links to a global labour market is thus on a path to raise educational levels. In so doing, it raises the standard of living of its citizens and, thus, raises the cost of living. Increased educational levels allow the country to compete in higher levels of skilled labour. As a country moves through these layers of educational/labour markets, the returns to education increase at higher levels. Thus, for families that can afford the best education, their children see increased gains for their education especially in escalating job markets and pay rates.

Indeed as Brown and Lauder, (1996) argue, a nation's ability to secure future economic growth and prosperity in a global economy is dependent upon the quality of its education system. They note that economic growth has become dependent upon the flexibility of a migrant workforce. In response to the firm's international expansion, labour migration and the conditions of migration, were regulated by firms and nations. However, this changed as mass production gave way to specialisation and diversification. Fordism's declining profitability and collapse can be attributed to trends in overproduction and under consumption (Pellerin, 1996). Deregulating practices of work (subcontracting, outsourcing), strategies, all used to decrease production costs, have extended the labour process beyond the workplace. In essence, they have restructured and globalised working environments. Pellerin, (1996) contends that labour power is critical to this restructuring. Nations have contributed to corporate restructuring by creating conditions that allow migration to be influenced or

controlled by corporate transnational needs rather than government-controlled strategies. Pellerin states:

> *Increased capital flows, changes in the organisation of production and fiscal crises of the welfare system have reduced the importance of the movement of labour as a strategy for capital accumulation.* (1996:89)

Capital's mobility rather than labour's is evidenced in the reversal in U.S.A. policies. In fact the decline in Mexican labourers entering the U.S.A. for employment opportunities and the development of Maquiladores (movement of U.S.A. capital and production centres to Mexico in exchange for lower labour costs and trade incentives) along the Mexican border, illustrate the effects of capital's mobility and power.

Today Oman, a nation within the Gulf Region and part of the Arab World, exists and thrives in an international and global context, which makes even greater demands on its educational system. With globalisation the political social system may not exist as it has been traditionally viewed grounded by geographic and nation-state concepts. However, traditional conceptions of identity are critical because they define representations between 'the self' and 'the other' and allow the development of a shared system of beliefs, values and meanings.

The blurring of national boundaries and reliance on unregulated trading and production transform traditional perceptions of power based on sovereignty and spatiality into mutually exclusive arenas for political and economic behaviour. Peterson (1996) argued that new mapping strategies are needed to situate people in this globalising world.

It may be argued that nations must struggle with the tension created by forces that push for global pluralism and the desire to maintain a distinct national identity. Indeed, it has been examined that the very forces of globalisation work against national, regional and group identities. Some have indicated that globalisation is causing movements toward a homogeneous global culture.

But the evidence exists to the contrary. While the forces of global capital may, ultimately, impact on all or nearly all countries, it is equally true that the manifestation of that force depends upon the unique history, culture and politics of a group of people. Thus, global forces have been instrumental in expanding economic growth in many Asian economies even while it works against such growth in many African economies (Ilon, 1997).

The strategy to counter negative effects of globalisation lies, in large part, with building on local strengths. For example, in the Arab world, a common language, religion and heritage shared broadly across the region means that many Arab states can best adapt to global forces by specialising in adapting new technologies and techniques to an Arab context. Clearly, software, books, movies and popular culture need a translation. But so too

do more elusive social, economic and political factors such as dress, banking customs, textbooks, packaging, commercial goods, transportation, and communication systems.

These same differences mean that the Arab world has a different view on social and cultural structures and, hence, may work differently in solving social and scientific problems. These differences become a strength in a "knowledge economy" where people who are globally trained but have cultural differences in values and beliefs bring fresh ideas and creativity.

Many countries have been able to maintain multiple identities among their citizens. However, in a global context, one might ask whether "belongingness" can be all encompassing, meaningful and satisfying for individuals. This international and global dimension is important when one addresses curriculum and innovation in Oman. Indeed as Kofman and Youngs (1996) note, globalisation relates as much to a world perspective as to the dynamic political, social and economic interrelationships within it. Until recently, a Eurocentric perspective dominated identity and identification issues. Identity was considered unitary and territorial in political and international relations. With globalisation, state-centric political identity is exercised as well as forms of non-territorial identity grounded on ecological, ethnic, religious, feminist and other non-state-based commitments (Peterson, 1996).

As alluded to above, education has long been thought of as a primary strategy to tackle issues of poverty. But, globalisation brings special challenges to this method of tackling poverty issues. First, the very forces of global economic change can raise aggregate levels of education in a country by changing the economics of education. As a society advances from a largely subsistence economy to one based on skilled labour and later to one built around a knowledge economy, whole groups within the society begin to see substantial returns to their investments in education. Whereas, in a national or regional economy, differences in income levels may have been somewhat limited, in an economy that is globally linked, differences in incomes among citizens may reflect at the broadest range of global incomes. Some people may well have access to jobs, careers and incomes that are comparable with the highest levels of incomes in the world. At the same time, few societies can claim to have totally eliminated structures citizens, which still leave at the bottom of the education/skill markets. Most societies still have people who are largely uneducated or who must sell their labour at marginal wages. Thus, globalisation brings about the social/economic structures that make for large-scale poverty and inequality (Wood, 1994).

Even if such poverty were tolerable within a society, it is not conducive to sustained economic growth. Citizens whose skills level is far below the norm of the society are a drain on the resources of the society. In some cases, these marginal citizens are geographically and

socially isolated. But social resources must be used to maintain this distance and enforce the laws and norms that dictate the inevitable interface of marginal people with mainstream citizens. If such people are not geographically isolated, their very social & educational marginalisation makes them difficult to integrate. The basic literacy, health practices and daily living rhythms of more mainstream people are disrupted by the patterns of living of those at the margin. Compromises or accommodation must be made or the social patterns become so disrupted that political, social or economic stability is put at risk.

Thus, the forces of globalisation are also forces that may bring about instability and raise the cost of maintaining a functional society. Education for the poor, then, becomes not just a means for the poor to build their own lives; it becomes a necessity for the entire society. Educational returns for the society, then, are not wholly captured by productivity returns of educated individuals, but by social, political and economic stability returns that build the base for continued economic growth.

Knowledge ties the globalisation process with education. The globalisation of world economies has caused the logic of production to change. Competitive advantage based on access to raw materials and cheaper labour have been reduced because of global access to both. Technological change has reduced the relative cost of both transportation and communication making global production profitable. As the value of raw material access and geographic location relative to consumption markets declines as a mean of competing, the value of knowledge inputs increases. Technology has made it easier to learn, or build new knowledge with diverse professionals and to combine knowledge across fields. Thus, a new type of knowledge production is becoming competitive.

This trend has reinforced the value of local knowledge – knowledge that is valuable within a specific context. Niche markets are built on local knowledge and values. Adapting products to local values and needs has is the hallmark of many growing companies (Morais, 2000). Thus, the definition of "knowledge" is gradually changing from "scientific" to "relative" or "contextual" knowledge (Scholte, 2000). In fact, some authors contend that knowledge (in contrast to information) cannot be separated from its context (Nonaka and Konno, 1998).

Much has been made, recently, of the coming of a knowledge economy. Frequently associated with globalisation, the knowledge economy, it has been alleged, opens opportunities and brings about possibilities for equalisation that were difficult or impossible in industrial economies. Frequently cited, as evidence is the growth of global networks of information and access such as the global growth of the Internet and increasing availability of computer technology in many regions of the world. These new technologies provide

access to information to a broad spectrum of the world's population and also provide the means to communicate cheaply and easily across national borders.

Along with advances and the spread of technology, the knowledge economy is thought to be about "knowledge workers" who make a living from their ability to think and create. The pharmaceutical industry, for example, is a largely a knowledge industry. Increasingly, old industrial "goods" are becoming knowledge products. It is said that 70 percent of the value of any new car is captured by the knowledge embodied in the car (research and knowledge engineering). The value of knowledge as an input into manufactured goods; the increase in pure knowledge products (such as software) and the demand for highly educated labour are evidence that a knowledge economy is on the rise as a primary source of new wealth creation.

But, it is likely that these evident pieces of a knowledge economy are really symbols of much more profound changes in the way value is created in the world. Technology is really a tool and its use is becoming more sophisticated. It is allowing people who were once geographically, professionally or culturally isolated to exchange ideas and build new solutions together. Equally, it facilitates the building of new conceptual frameworks to tackle issues that have eluded solutions from professionally or culturally isolated research. Environmental issues are prime examples. Global warming involves cultural, political, social and economic forces at work. The ability of the world to find sustainable solutions to global warming will depend upon the ability of diverse populations to work together to build new approaches to tackling this complex problem.

Thus, the hallmark of the knowledge economy may well be that the best investments to education are not just building increasingly higher levels of education and skills, but in building the ability to approach complex problems creatively and to work with diverse populations to find sustainable solutions. Software engineering is rapidly becoming a global product – tackled from several geographic centers all working in co-ordination. New methods of communication are being developed in Scandinavia and Korea even as North America refines various communication products.

It is also true that the knowledge economy, while affecting most directly so-called knowledge workers, will affect the lives of even the most marginal populations. By changing the structures and dynamics of the larger world, the context in which even the most marginal peoples live and work changes. So, too, their opportunities are altered and constraints for participation in a larger world - the world of communication, financial markets, transportation and labour markets. These change around them. They may, even without altering any age-old means of surviving, become increasingly marginalised and at risk.

It has been seen (Brown and Lauder, 1996) that globalisation of production and finance erodes national economic structures, weakening state sovereignty and political identities. Even as it does so, it builds the possibilities of creating new communities that are neither nationally nor geographically defined. Software engineers worldwide have come together to build a powerful competitor to Microsoft's Windows, for example. The network of these people, some of whom probably do not share a common spoken language (although they may share a common computer programming language), demonstrates the power of new "communities" and alliances.

Conceptions of self and society are not limited to geographical considerations but are expanded to include any socially constructed entity. This may be dynamic in nature and subject to constant change. In essence, persons can be members of multiple social entities. It is the task of educational systems to adopt policies, structures and processes in support of these new social realities (Stehr, 1994).

Although one may examine the impact of globalisation on one country, Oman, one also is aware that we are operating in a world system of states that are defined politically by state boundaries (Taylor, 1996). In empirical studies, nation states are considered the unit of analysis. For example, state-generated statistics are used to describe world economic transactions in international trade relations. State-centric thinking focuses on relationships of state to society with minimal recognition of other states or other social configurations within or among states. Taylor asserts that modern states may be transitory; for example, the political, economic and social changes in Russia, Germany, Czechoslovakia and Yugoslavia have destroyed the traditional geographic and nationalistic perspectives in these areas. International migration usually is predicated upon a set of economic, political, environmental, and/or ideological conditions that affect the terms and directions of migratory flow. Individual and collective migrants are participants in structural change. No country wants to restrict its ability to participate in a world society. In order to support this

pressure to global economic and political activity, countries such as Oman are encouraged to develop contiguous education systems. These include skill curricula.

In the past, education was linked to social and political conditions that may be seen to directly evolve from the economic production process. Just as corporate strategies and actions have influenced global politics, so too have new knowledge systems. Farrands (1996) develops a conceptual framework that views the world through a - knowledge based technologically - oriented lens. This has the ability to replace geographic and national boundaries with social constructs that can define new power relationships among nations based on intellectual capital. For example, telecommunications and global networks have

influenced greatly the way businesses operate, collaborate and compete and these networks have the ability to manage the flow of knowledge and intellect at a global level.

Traditional institutions and societies are evolving into a global perspective and are affecting every aspect of individuals' lives. Tendencies of developing countries are to adapt the structures and practices of developed countries, including (and especially) those related to education, in an effort to gain prominence in the world society. Often these practices result in distortion of the original structures and do not necessarily fit the developing countries' needs.

Spybey (1996) argued that globalisation can be seen in all aspects of life. Its influence is present in global instantaneous transmission and retrieval of information; international product and goods in supermarkets; and transnational corporations, workforces and in the military. New configurations of "haves" and "have nots" result. Spybey (1996) predicted that the accelerated speed of technological development will render those who lack the ability or desire to keep up, as the "have nots" in a global society.

The growth of "have nots" is of particular concern to writers such as Brown and Lauder (1996). They argue that modern complex production processes and maintenance of competitive advantage, so important in a global economy, will depend on rising quality and productivity of human capital in the "have" economy and society. Knowledge, learning, information and technical competence are the new raw materials of international commerce (Brown and Lauder, 1996:4). This applies no less to Oman than to industrialised, and now post-industrialised societies such as UK, New Zealand and USA. The argument is that if employers are relied upon to provide training, training usually focuses on specific, immediate needs. Thus, training is narrowly focused and lacks the flexibility to meet rapidly changing labour requirements. In addition, under conditions of intense competition or economic duress, training funds are reallocated to underwrite competitive strategies.

These are important issues for one to consider in the context of Oman. In the recent past Oman has been dependent upon non-renewable oil resources, which are expected to last for only another two decades. Yet, the economic indicator (below) shows that petroleum activities represent major source of Government revenue.

The structure of gross domestic product (end of December 2000)

Action	1999	2000
Petroleum	40%	48%
Construction	2%	2%
Wholesale & Retail Trade	13%	11%
Public Administration & Defence	11%	11%
Other Activities	34%	30%

One important feature in the future development of Oman's economy, is the rising population of young Omanis leaving school. In 2001, expected number of Omani finishing secondary school will be over 40,000 students. This compares with 35,862 students in 1999/2000 and 40,370 in 2000/2001 (Educational Statistical year book (2000).

Another feature in Oman's political economy is the large population of expatriate labour force, which in 2001 is estimated at 500,000 comprising of 25% of total population of the country. The government of Oman has therefore had to face these challenges by introducing several steps and goals which have been incorporated in vision 20/20:

- Reduction of reliance on oil resources in view of the anticipated gradual decline in oil reserves.
- Diversification and expansion of the economic base for the purpose of providing renewable resources of income to support the process of sustainable development and the increasing government revenues from non-oil resources. The government invested very heavily in non-petroleum activities such as natural gas, mining, fisheries, agriculture, light industries, and tourism (hotels, restaurants, recreation facilities). In the field of privatisation, several projects have been announced in the area of electricity, water, airports etc. all these efforts aim at gradually decreasing the dependence in petroleum activities.
- Creation of macro-economic climate that is more conducive to private sector development and strengthening the private sector role in the national economy.
- Upgrading labour market efficiency through the correction of the existing disequlibrium, through the increase of work force and rationalisation of the use of expatriate work force.

The role of the private sector is seen as crucial to Oman's economic performance. The growth of private sector alongside the desire reduce expatriate labour have become central to the Sultanate's macro economic planning.

Numbers of private sector employees are:

Private Sector Employees	1998	1999	Increase/Decrease
Omani	46171	50665	+ 9.7% in year 1999
Non Omani	501543	474717	-5.35% in year 1999

These figures show that Omani participation in the labour market work force increased; this is seen as a positive indicator of Omani participation in the economy and especially in the private sector. To aid this process, there are a number of policy initiatives, which have been developed and are being introduced:

- Upgrading advanced technology skills of the national work force.
- To achieve sustainable development on one hand, and to realise a decent standard of living for the Omani people on the other.

Dr. Al-Hussaine stated "Investment in education is the best option for Oman. Twenty years hence, as a post oil economy, as highly educated and trained manpower will be the only reliable economic resource" (Al-Hussaine 2001)

From the foregoing one can see that the human resources development is one of the primary goals of vision 20/20 and that education is the key to economic success in a knowledge based global economy, achieving these goals through basic education reform will prepare Omani citizens for life and work inline with recent national and international economic developments aiming also at improving the quality of education.

Therefore it may be argued that in a global economy, a commitment to high quality schooling and investment in human capital are required. In such nations prosperity is contingent on developing a national culture of learning. One might suggest that success is based on the co-operative efforts of state, employers and workers. The state assumes the strategic role of providing the infrastructure for economic development that infrastructure being a highly educated workforce, telecommunications networks and transportation systems. Educational competitiveness among nations has focused on nations' efforts to develop the full potential of larger populations, increased access to advanced training or tertiary education, higher national and/or international standards of achievement and an emphasis on lifelong learning.

In an era of social reconstructionism, education is perceived as providing opportunities for the growth of individuals as well as society. Improving education to improve society by creating democratic structures that fostered quality education for all as seen in the work of Dewey in the United States of America and Manneheim in the United Kingdom (Lawton, 1983). However, social reconstructionism is giving way to social accommodation for political and economic betterment (Donn, 1998). Replacing educational goals of equity, equality and social justice with "outcomes" is the economic analysis now beholden to the cost-benefit implications of educational initiatives. Within nations, public education will no longer be perceived and interpreted as "education for all" but will become market driven (Donn, 1998).

Donn (1998) asserts that education plays a critical role in transforming twentieth century manufacturing economies into twenty-first century information-based economies where knowledge is considered as a commodity and continual learning is a prized attitude and value. In such an economy, computer-based technology, flattened management systems and participatory work teams require workers with high skill levels. One outgrowth has been the demand in education for meaningful, higher standards of accountability and performance by students and educational agencies. Educational decision-makers have adopted emphasis on quality management, which led to national and world-class standards of quality for production processes and products. National and world-class education standards provide a common language for nations as they try to attract technological and information-based industries to establish operations within their boundaries and employ their citizens.

Citing international competitiveness as critical to a nation's ability to prosper in the twenty-first century, Donn (1998) proposed that nations that have limited capital and material resources will have to rely upon the skills and knowledge of people to improve productivity. As production systems rely on technology for process innovations and improvement strategies, intellectual skills will be demanded and will supersede manual skills. As skills and knowledge become important, and come to be seen as marketable skills, formalised standards of achievement are needed to create a common language across industry, education and government. These are considerations one may focus upon in an analysis of the educational reforms now undergoing implementation in Oman.

Knowledge and information-based industries have changed work requirements from reliance on narrow knowledge bases related to a specific industry, to broad-based, transferable skills, (referred to as "soft skills") including problem-solving, communication and teamwork skills, that can be applied to a variety of newly developing industries. Oman is one such country because corporations and industries have shorter life spans, workers need to maintain flexibility in skill attainment and a positive attitude toward continual learning –

life long learning – if they are to be successful in adapting to a turbulent economic environment and maintaining employment.

Most authors would agree that education will have to change dramatically to prepare all peoples for participation in an increasingly global world where knowledge plays a larger and larger role. For some, curriculum reform represents an opportunity to get beyond the boundaries of the traditional curriculum of learning. From learning what the focus has now turned to learning how to learn (Marshall and Tucker, 1992; Reich, 1991). Others contend that, while major curriculum reform is needed, the Reform, in and of itself will not guarantee a more equitable labour market (Kraak, 2000).

It has been seen that quality education is critical to a nation's success in a global society. There is significant statistical evidence that good education and literacy positively impact on real wages and the ability of developing countries to catch up with developed or "established" countries. Poor schooling is found to have a negative influence on economic development and cause a country to fall behind or stagnate.

It is proposed that for high-growth countries, characterised by economic and population growth, globalisation will be economically and educationally advantageous and will become necessary for these countries to participate in a global environment (Ilon, 1994). However, in established countries where structural adjustments will force economic choices, education may be impacted negatively (Ilon, 1994). Economic implications of educational initiatives will drive education decisions rather than the previously accepted educational goals of equality, equity and social justice. (Ilon, 1994) notes that a stratified system of education that caters to specific population segments will result in market-oriented, commodified education. Those with globally competitive, sophisticated skills and adequate financial resources will support private education. Quality public education[3] will be accessible to a middle class population that participates in a locally competitive labour market. Those employed in low wage jobs requiring minimal skill levels will be relegated to poor quality public education.

On the other hand, in England and New Zealand, adoption of standards was viewed as a strategy for dismantling tripartite class distinctions in education. Free compulsory secondary education in England and New Zealand, was intended to eliminate class distinctions that had resulted from the creation of a tripartite system Lawton (1975). For example, students in grammar schools received a different curriculum to those in secondary

---

[3] In this thesis 'public' means State. In many countries in the world "public" means just that: in the U.K. 'public' is actually "private education".

modern schools (Harker, 1975). Thus, preparation for national examinations, required for admission to higher levels of education, was unequal. These writers note that the introduction of comprehensive schools did not eliminate this three-tier system of education but served to replicate these class distinctions within one building. It can be seen that the present demands for higher level skill development and acquisition of a sophisticated knowledge base by all students, has led to a national curriculum for all students.

It has been suggested (Skilbeck, 1990) that curricular innovations are embedded in, and supportive of, a view of society as part of a globalising political, economic, and technological world. Indeed it has been argued that education plays a critical function in the internationalising and globalising of such societies.

In this curriculum discourse, evidence exists of an integration of academic subjects (literacy, numeracy) with occupationally related skills (analysis, critical thinking, problem solving, technological competence). It is interesting that qualification frameworks in Scotland, England, New Zealand and South Africa (Donn, 1998) are defined and utilised in the same context as the standards of learning that have been established in the United States of America and now also in Oman. These broad frameworks and standards provide overall uniformity and drive the content, quality and delivery of the instruction and learning process at a national level.

In some countries, such as the United States of America, Scotland and England, these reform efforts may result in a tightening of central control over curriculum and performance standards. In Continental Europe and in Oman, the reform efforts may lead to distribution of control over curriculum and instruction to regional and local levels while maintaining central control over a broadly defined framework of curriculum and standards (Skilbeck, 1990). Thus the "core" curriculum becomes the mechanism for controlling teaching and learning practices.

Further, it has been noted that in democratic societies, there are varieties of approaches to curriculum control. Given the prerequisites of democratic pluralism it would be undesirable to concentrate curricular control at one level only. In England and the United States of America, political pressure, public dissatisfaction and demand for improvement saw shifts in control, responsibility and accountability. As a result, in America, the state level is assuming greater responsibility for developing state-defined standards and assessments. Broad-based curriculum decisions are being made at the state level, which is influenced by federal legislation.

Although a national education system has existed in Oman for approximately thirty years, it has borrowed considerably from the curriculum found in countries such as the United States of America and the United Kingdom. The Oman education system of the 1970s

exhibited all the characteristics of a traditional curriculum with its emphasis on control over content, teacher delivery of instruction, and explicit detail of what the instruction would include. Current educational reform in the 1990s and 2000 and Oman's vision for education for the next twenty-five years takes into consideration curriculum reform and the impact of globalisation. Standards-driven curricula that focus on student learning and performance are found in many of those countries considered to be global leaders.

Although similar reform efforts are taking place in many countries, each must identify its unique requirements and needs when initiating reform. For example, in the United States of America, where individual states traditionally have controlled education, approaches to national standards have been advocated by national content-focused professional organisations, such as the National Council for Teachers of English and the National Science Foundation. Many individual states have adopted content standards aligned with national standards. Academic performance expectations including defined standards and assessment have been developed by many states. Traditionally, local boards of education have controlled local educational agencies. However, in many individual states these state-defined standards and assessments are becoming the "control mechanism" and are contributing to efforts to develop uniformity in standards, instruction, and assessment among the individual states themselves.

It is therefore the case that acceptance of a national curriculum varies amongst nations. Using consensus-building strategies, such as committees and public discussions, Scotland has formulated a national curriculum framework that was accepted by the public and education professionals (Kirk, 1991). Although creation of a national curriculum in England has caused great debate among education policies makers and key players in the educational world, the national curriculum, is intended to extend equity and equality of educational opportunities to all England's children (Lawton and Chitty, 1988).

Indeed, careful analysis of Oman's economic direction and future, as indicated in the 20:20 Vision, is required. Through this one may perceive an educational programme intended to sustain economic and societal growth and one that will meet the specific workforce needs of Oman. These needs may be different from those of well-developed countries. Modelling the Omani education system in the image of the global powers may equip students with skills that do not match the emergent economic opportunities in Oman. It may lead to these citizens'-migrating and seeking employment on foreign soils.

However, Omani decision-makers involved in curriculum considerations, maintain a global perspective to ensure Oman's ability to participate in a global society and attract globally oriented opportunities for growth and development within Oman.

As in many other countries, in Oman this concern for curriculum has taken a specific direction with an emphasis on core areas of learning – usually referred to as the "core curriculum". This usually includes language skills, mathematics, science and perhaps social history.

In this context, it is important to come to an understanding of curriculum reform currently taking place in Oman. The change is complex. Since its inception in the 1970s, education in Oman has functioned within a centrally controlled national education system, one that used detailed curriculum guides and prescribed lesson plans to ensure that education of Oman's students was uniform and Oman-oriented. These steps were taken to compensate for a teaching force predominantly composed of expatriate teachers.

It is in this context that Oman's policy makers and educational planners proposed changes: from a hierarchically centralised to a more decentralised structure; from content – based to standards based – curriculum design; from a staff of expatriate teachers to local teachers; from a teacher role of transmitter of knowledge to facilitator of learning; and from limited educational opportunities abroad and at home to domestic universal public education; from students as receivers of knowledge to students as active learners.

Many countries have adopted standards-based education, and an examination of the standards adopted by each country reveals that there is a great deal of similarity in the content areas, the knowledge and the skills required within predefined learning areas. There is agreement that communication/language skills, mathematics, science, social history and technology are commonly found in each country's curricula areas and in the literature there appears to be further similarity in a focus upon defined performance levels.

In many Middle Eastern countries, another mechanism for curricular control, content-specific curricula, allows close control over curriculum and its delivery by the government. In some cases this goes as far sometimes, as defined daily lesson plans. This was especially appealing to Oman, where initially expatriates dominated the teaching force. Centralised curriculum development and inspection of classroom practice ensured that Omani culture (history, traditions and values) permeated all instruction. As Oman constructed its national framework of higher education and expanded teacher training standards and requirements in the post 1994 period, it was able to begin to build an indigenous native teaching force. Thus, control over classroom practices no longer has the same priority, context, or function. The emphasis of standards-based education on students' taking an active role and responsibility for their own learning calls for flexibility at the classroom level thereby allowing students a freedom for individualised learning. However, there is a need for a guidance system that will ensure that all students acquire and perform at "performance levels" prescribed at the time.

The latter approach therefore can be seen as quite distinctly different to the former approach not only in practice, pedagogy and planning but also in philosophy.

These changes make a fascinating backdrop against which curriculum change in Oman is taking place. Oman, it will be seen, is a country firmly within the Arabic world but is also west-ward-looking. This juxtaposition poses interesting possibilities for Omani political players as they introduce education policy for the Oman of the 21st century.

In order to delineate the substance of this discussion it is important to present an overview of the development in the field of curriculum related to curriculum theory, innovation and evaluation. This will include a presentation of models of curriculum design, development and evaluation. The next chapter therefore, will outline the historical development of curriculum theory in the Omani context.

Chapter Two
Curriculum Theory – the Omani Context

Chapter One has drawn attention to the globalising pressures on education policies in most countries of the world. It was noted that these pressures result from changes in national policy and international economic and social pressures which have been conceptualised as globalisation. The impact may be seen most pertinently in the case of curriculum policy, which has changed dramatically over the past ten years. Oman's curriculum policy is no exception. It has become the case that Oman's curriculum design owes more to an emerging global approach to learning (one based on constructivism) than to policies from a previously supported behaviourist perspective. Behavioural theory is based on research in learning psychology and holds that learning is controlled externally, that the learner acquires knowledge under the control of an external entity (a teacher, a trainer, a parent). Constructivism, on the other hand, places responsibilities for learning with the learner.

To delineate these understandings, it is intended that this chapter will outline the historical emergence of curriculum design and development from its early days in behaviourist theory. It will then focus upon the current popular approach to curriculum development, notably that of constructivist theory. It will been seen that this new knowledge, based on research in cognitive psychology, holds that learners learn by constructing their own knowledge through active processes rather than by simply absorbing knowledge directly from another source (Ryan and Cooper, 2001). It will be noted that in Oman curriculum policy has become highly contentious. These issues will form the basis of this thesis.

Thus central to an understanding of curriculum reform currently taking place in Oman will be an analysis of the academic origins of curriculum thought. These will include psychological, philosophical and sociological theories and models. In this way constructivism will come to be seen as part of a much wider, global, transformation of education, where curriculum policy becomes "constructivist rather than behaviourist" in academic origin. It will be seen that constructivism itself is part of a much wider approach to internationalising the role and importance of education.

There have been recent changes in curriculum design, developments, and implementation which have many of the hallmarks of this "globalising" tendency. Not only do these curriculum reforms exhibit pressures from outside Oman, but also they are not necessarily part of, or congruent with, the historical and educational traditions.

The education system of Oman may be under extreme pressure given this disjuncture between past tradition and current political demands. From these historical accounts it will become apparent that in Oman curriculum policy has become highly contentious: indigenous

educational traditional policies which are being supplanted by international imports into a fast-changing Oman are not necessarily conducive to the educational structures which exist in Oman. These issues form the basics of Chapters Two and Three.

This chapter therefore will draw attention to the role and importance of disciplinary thinking in curriculum design: notably this literature draws on curriculum from the perspectives of psychology, philosophy and social theory and therefore the terminology may differ although the content of the understanding may be very similar. From this overview of the literature, Chapter Three will address Oman's educational system.

Definition of Curriculum

Curriculum was recognised as a specialised field of behaviourist study by Bobbitt (1918). A report by the U.S. Commission on the Reorganisation of Secondary Principles, and (Bobbitt, 1918, 1924) believing a curriculum should be determined by studying the activities of adults in society and thereby discover what knowledge individuals need to know. This commission identified 821 instructional objectives. With the 1924 publication, the emerging field of curriculum development became central to teacher education. Curriculum revision, at the local school level, emphasised teacher re-training. This occurred within a behaviourist model of learning.

Since then, the many definitions of curriculum (all within this behaviourist tradition) have ranged from the narrow, which define a curriculum as the subject matter taught or evaluated in schools, to the broad, which define a curriculum as all the experiences offered to learners while in school (Doll, 1978). Interestingly, Musgrove (1975) defined curriculum as an artificial contrivance designed to accelerate, promote and manage change. However, in an attempt to generate a more socially constructed definition, Oliver (1977) interpreted curriculum within four dimensions: the programme of study, the programme of experience, the programme of services, and the hidden curriculum. Thus, in some behaviourist definitions of curriculum, function (content and process) is emphasised (Doll, 1978) whereas in other definitions, structure (aims, objectives, content organisation, evaluation) are emphasised (Taba, 1962).

Although behaviourist definitions of curriculum may vary, they share one assumption: a curriculum represents a plan for action and not the action itself, which is instruction. Johnson (1967) distinguished between curriculum and instruction, curriculum prescribes (or at least anticipates) the results of instruction and does not prescribe the means (Taba, 1962:130) viewed curriculum and instruction as two ends of a continuum.

Within the behaviourist tradition educators have dealt with the complexity of curriculum by dividing, categorising and classifying knowledge into disciplines or knowledge areas so that it may become comprehensible and manageable. Beauchamp (1981) organised knowledge into three divisions: humanities, natural sciences and social sciences from which applied knowledge areas are derived. Education became an applied knowledge area because of its unique blend of multiple disciplines and the rules and procedures that exist for combining and utilising these varied discipline areas. Looking at education, Beauchamp (1981) distinguished among educational theories related to specific areas, such as administrative, instructional and curriculum theories. Further, curriculum theories can be categorised as "design theories" – the basic organisation and content of curriculum plans – and engineering theories – the plans, principles and procedures that guide curriculum development activities (Beauchamp, 1981).

Most definitions deal with sets of phenomena and relationships (Ornstein and Hunkins, 1988). Kaplan (1964) defines theory as a device for interpreting, criticising, unifying and modifying established laws as well as discovering new generalisations. Snow (1973) defines theory as a symbolic construct of generalisable facts or concepts that are related and/or systematically connected. Bohm (1983) regarded theories as perspectives that try to explain facts and events that occur. Scientific theory, considered the exemplar of theory formation, relies on the accumulation of generalisable hypotheses, facts, and laws from empirical findings.

On the other hand, a majority of curriculum theory is based on philosophical or humanistic theory, which is used to explain human existence and is based on assumptions or beliefs that define what "should be". This normative theory, based on values, provides guidelines of what material should and should not be included in curriculum.

Historically, discourse about curriculum theory gained prominence among researchers in the 1940s. The growth of scientific theory and concerns about objectivity produced an educational demand or drive for, and the introduction of testing, statistical tools. These enabled researchers to manage investigations and to process gathered data. Ornstein and Hunkins (1988:285) credit Bobbitt and Charters, proponents of adapting scientific theory to curriculum theory, for utilising activity analysis to correlate the objectives of the subject with specific activities. In other words, those tasks and skills that students had to learn. Dewey's curriculum theory linking school to society has been based on the premise that children learn through activities and that curriculum should relate knowledge to prior experiences. However, these works could not be viewed strictly as curriculum theory. There is consensus

that the Beauchamp approach while addressing theory – by defining three knowledge areas – falls short of theoretical premises acceptable to a majority of scholars in this field.

The status of curriculum theory has led to disagreement among experts in this area. Although Macdonald (1978) believed curriculum theory was in a formative stage and was not clearly defined, Kliebard (1977) argued curriculum theory existed, while Schwab (1970) proposed that such theory could not exist. Ornstein and Hunkins (1988) contended that one creation of a single curriculum theory is unrealistic because of the complexity of curriculum and its all-encompassing nature.

Johnson (1967) formulated a model for curriculum theory that focused attention on the definition of curriculum (an intended series of learning outcomes) and differentiated between curriculum as a plan and the means that generate such plans. Macdonald (1965) contended that curriculum is one of four interacting subsystems (curriculum, instruction, teaching and learning). The intersection of these four components creates ideal conditions for the curriculum to be actualised. Wilson's (1971) open access curriculum model presents three categories of knowledge and the methods teachers use to manage learning in each category: facts – lectures and controlled reading; contested truth – seminars; and open exploration – research. Regardless of the above discussions, the past thirty years 1970-2000, have produced several theories and models. Four theoretical premises have been identified for curriculum theory: formal (structure of disciplines as components of curriculum), event (scientific investigation of occurrences), valuational (norms and values guide content and objectives), and praxeological (focus on means of obtaining desired results).

Recent inquiry concerning curriculum theorising reveals that disagreement is still prevalent. While some researchers feel attention should be focused on curriculum theory, others argue that it is more important to focus upon how knowledge is created and used.

Conceptually, curriculum theorists are divided into three camps; traditionalists, conceptual empiricists and reconceptualists (McNeill, 1985; Pinar, 1978). Traditionalists view curriculum as a structure with relationships that can be identified, defined and controlled. (Members of this school include Tyler, Tanner, Zais, Taba, Goodlad and Saylor.) Conceptual empiricists concentrate their efforts on formulating theory. Scientific knowledge and research enable them to produce theories that practitioners can use to justify appropriate content for curriculum. They are characterised by a systems-managerial orientation to curriculum and include Posner, Bruner and Stufflebeam. Reconceptualists focus on the outcomes of the curriculum, not its components or structure, and its effect on persons. They include Pinar, Macdonald, Apple and Friere. These critical theorists (social and political counterparts to psychology's constructivists) are concerned with eliminating oppressive conditions in society (power, wealth, control, social class); those conditions being the ones

that are seen to restrict students potential for emancipation. Through a curriculum that challenges existing social and political structures empowerment amongst students may be encouraged. These approaches will become valuable bases for discussions in the second part of this chapter.

However, in the coming discussion, the terms of behaviourism, curriculum design development, evaluation and models of evaluation will be delineated. Following this, constructivist discourses, notably through critical theory, will provide a framework through which one may examine the approaches to management and innovation.

Curriculum Design and Development

It has been seen that curriculum may be considered as a plan for providing learning experiences for learners in formal educational settings. Curriculum development however is the means by which such a plan is prepared and implemented rather than an examination of how teaching and learning occurs in practice. Curriculum describes a product; curriculum development (sometimes called curriculum engineering) describes the process by which this product is produced.

According to Oliva (1982), curriculum development consists of three phases: planning or design, implementation or action, and evaluation or control and judgement (Oliva, 1982:25). Lewy (1978:15) suggested six stages of curriculum development: determination of general aims, planning, tryout, field trails, implementation, and quality control. These stages need be neither hierarchical nor linearly sequential. The entire system may be cyclical.

Curriculum development is viewed by educators as the process of making programmatic decisions and of revising the products of those decisions on the basis of continuous and subsequent evaluation; a model is perceived as giving order to this process (Oliva, 1982).

Elemental or Sequential Models

In these approaches, the learners are considered an 'input' into a system whose goal is to affect changes or 'output' with specific characteristics. Many of these writers have developed their perspectives from the work of Tyler. Tyler's position paper on the components of curriculum theory presented at the 1947 University of Chicago curriculum conference is credited with delineating a scientific, positivism of curriculum theory. Using perennial theory, Tyler's curriculum design was based on four key components: purposes, learning experiences, organisation and evaluation. The acceptance and support of scientific research methods in education and curriculum matters dominated research. In the late 20th

century, it remained the dominant paradigm. Merging work of behavioural psychologists, such as Thorndike, with the analytical perspective of perennialists like Tyler, created a technical rationality to curriculum development that emphasised a mechanistic, positivistic approach. This approach reduced curriculum development to a simplistic, rules-ordered mechanical design that concentrated on content and components rather than learners and learning situations.

This model, usually called curriculum engineering, uses various systems approaches. Its practitioners are generally of behaviourist orientation. The models differ in whether they regard the sequences as linear or cyclical and whether they proceed from the global to the particular or from the particular to the global. Tyler's work delineates four models, which can be included within these categories.

Tyler's Model

In Tyler's (1949) model one begins by gathering data from three domains, defined as follows:

The learners. The curriculum planner should analyse data relevant to the learner's total range of needs and interests – educational, social, occupational, physical, psychological and recreational. This may be done through observations by teachers, interviews with students and parents, questionnaires and other known "tools" for collecting data.

The society. The curriculum planner should analyse both the local community and the whole society in the areas of health, family, recreation, vocation, religion and civil roles to identify the beliefs and traditions, values and needs of the community.

The subject matter area. The curriculum developer in this area must play the role of a subject matter specialist and analyse the nature, logic and sequence of the subject matter area. Once data has been gathered from these three domains, provisional objectives may be drafted. The provisional objectives are then put through two screens, defined as follows:

1. *Philosophical Screen.* The recognition of the importance of every individual human being regardless of his race, nationality, social or economic status. This recognition affords an opportunity for wide participation in all phases of activities in the social groups in the society. It supports the encouragement of variability rather than demanding a single type of personality.

2. *Psychological Screen.* Knowledge of the psychology of learning enables us to distinguish changes in human beings that can be expected to result from a learning process. Knowledge of the psychology of learning enables us to distinguish goals that are feasible from those that are likely to take a very long time or are almost impossible to attain at the age level contemplated. Psychology of learning gives us some idea of the length of time required to attain an objective and the age level at which the effort is most efficiently employed (Oliva, 1982:35).

After the objectives have passed through these screens, they may be put through additional planning steps, identified as follows: selection of learning experiences; organisation of learning experiences, direction of learning experiences; evaluation of learning experiences. Finally, they may be refined into precise instructional objectives.

By providing stringent criteria for the formulation of course objectives, Tyler influenced many of the fundamental curriculum innovations of the 1950s and 1960s, in the US, particularly in the field of science. Priorities shifted from memorised accumulations of discrete facts to an emphasis on basic concepts, processes, relationships and sequencing. It is this that has impacted on subsequent curriculum development. Although well defined curricula in particular subject areas emerged under the influence of Tyler's model, the model turned out to be less effective in defining global curricula for particular levels of education, such as at the primary school. The reason appeared to be that the model provided no mechanism for integrating different types of knowledge. This would, indeed, become a problem in the Omani context because efforts to improve instruction prior to the reforms of 1995 isolated subject areas. After the reforms of 1995 there was more emphasis on integrated disciplines wherever possible, such as with science/maths/computing. Also, the Reform calls for emphasis on global education. Therefore, it may be suggested that Tyler's model has been less effective in this case because it does not integrate disciplines.

However, the utility of Tyler's approach for an understanding of the principles of efficacious implementation of an education policy innovation is profound. It has enabled educators to think and plan rationally for educational outcomes. Further, as subsequent writers have attested, there is value in defining stages and philosophical screens. Indeed, Beauchamp (1964) and Taba (1962) two writers subsequent to Tyler may also have reflections, which become relevant for Oman.

Beauchamp's Model

Beauchamp (1964) identified five decision-making constituents of a model for curriculum engineering: (a) the arena; (b) selection and involvement of people; (c) organisation and procedures; (d) curriculum implementation; and (e) curriculum evaluation.

The arena refers to the scope of the development efforts, which may range from a classroom to a nation-wide school system, as in the case of most Arab countries.

Regarding selection and involvement of people, Beauchamp attempted to set criteria for the involvement of administrators, teachers, students, parents and members of society. Such criteria, which could include time, qualifications, scheduling, roles or other factors should be realistic. In Oman – as in many Arab countries – this is important.

Beauchamp divided organisation and procedures into five successive phases: (a) formation of a Curriculum council to supervise the overall co-ordination task; (b) appraisal of present practices; (c) study of alternatives; (d) formulation of criteria determining decisions regarding what should go into the curriculum; and (e) designing and writing the new curriculum.

He also emphasised the importance of the implementation phase. He asserted that while many curricula had been well planned, far fewer had been systematically implemented and, consequently, "had failed and had been ignored" (Beauchamp, 1964). It is to be hoped that such a fate is not the one awaiting the current curriculum innovations in Oman.

Beauchamp divided curriculum evaluation into four stages: (a) the teacher's use of the curriculum; (b) the curriculum design; (c) student outcomes; and (d) the curriculum engineering system.

In response to criticism that his model was a version of the top-down administrative model, Beauchamp noted that his model incorporated procedures that had become well established in school practice, which tended to favour the administrative model. That is a model easily recognised in past Omani education policy and practice, with its concern for controlling curriculum change and the introduction of new ideas. This is why reform is important to the development of educational leadership for the 21st century and is important in Oman.

Taba's Inverted Model

Taba (1962) expressed three criticisms of the traditional deductive sequence of curriculum engineering that commences with general issues and moves to specific ones:

- The deductive process to reduce the possibility for a creative innovation because it limits the possibility of experimentation from which emerge new ideas and concepts of curriculum.
- Curriculum committees deduce what is theoretically appropriate, but this judgement cannot be validated until implementation has taken place for a good length of time. This means that the plans produced have been based on logic, not on empirical results.
- Because these plans were deduced on logical bases, they tend to consist of very general, abstract prescriptions of sketchy schemes of instruction.

Theoretical designs of curricula are developed with meagre foundations in experimentation while practice and implementation is carried on with insufficient understanding of theory. This gives theory an unreal quality and forces black and white thinking (Taba, 1962:20).

As evidence of her argument, Taba cited the failure of the core curriculum. Taba suggested an inductive sequence that began with the planning of specific teaching units by classroom teachers who implemented them and validated their applicability through testing. Then these units could be used as an empirical base for designing the overall curriculum. Such a sequence could help bridge the gap between theory and practice because the production of "teacher-learning" units combines theoretical competence and practical experience in teaching. Since such units were produced and implemented by teachers within the system, they can easily be introduced in the entire system without resistance. It was suggested that curricula, including both a general framework and tangible teaching-learning units, were more likely to affect classroom practice than deductive sequences which stop short of the specific guidance afforded by the teaching units.

Taba's model consisted of five stages: production of pilot units, testing the experimental units, revision and consolidation of the units, development of a framework, and installation and dissemination of the new units. She also developed an eight-step sequence as a guideline for teachers producing new units: diagnosing needs, formulating specific objectives, selecting content, organising content, selecting learning experiences (activities), evaluating and checking for balance and sequence. Taylor's (1975) learning experience model, grounded in psychology, is similar to Taba's model and emphasises the ways and methods of thinking and learning utilised by learners. For curriculum developments in Oman

these considerations have become important. Current reforms are based on conceptions of the relationships between thinking and learning that are experienced by students.

With regard to decision-making, Taba's model may be considered to be a variant of the grass-roots model, (which will be explored later in this chapter) with more elaboration of the phases of curriculum development. Its major strength was its integration of theory and practice. In Oman this may be exactly what is required to fully implement educational reforms.

Human Factor Models

Whilst many curriculum developers had agreed that "curriculum change" was in fact a "people's change", this was barely acknowledged in most curriculum models. With the complications of reconciling the emphasis between the behaviourist approach of elaboration of objectives, process and phases and the managerial and decision-making hierarchy, the human factor was usually neglected. It has been suggested a model emphasising the development of the human factors. This model has been widely adopted in a number of countries where educational administration has become an established profession. However, with its focus upon an individual's education, it has not been viewed as particularly helpful for an understanding of educational policy-making in Arab countries, including Oman. However this oversight may now be corrected. Through the introduction of the new educational reforms authority is given to teachers, Principals, and directors of districts. This structure of reforms, authority has emerged as paramount in visions of new educational policy making.

Roger's Interpersonal Model

Roger's model was predicated on the assumption that society could best meet the challenges of an ever-changing world by developing individuals who are flexible and adaptive. To produce such individuals, their teachers need to be open to change and process oriented while the education system should be conducive to innovation and personal growth. To promote this goal, Rogers encouraged the formation of sensitivity training in T-groups, beginning with ten to fifteen peers – administrators, teachers, parents, and finally, students. Each T-group had a trained facilitator who would establish the unstructured environment conducive to free expression, interpersonal communication, risk taking, and honest exploration of feelings.

After all the peer or vertical groups had met, Rogers extended the technique to "horizontal" groups, consisting of two board members, two administrative officers, two

teachers, two excellent students, and two failing students. These were chosen from those who had first undergone training in the peer groups. He argued that through communication achieved without the status barrier, changes could occur, not only to the curriculum but also to the entire educational climate.

Although Rogers' model lacked the technical components that curriculum specialists usually addressed – specific details of content, learning objectives, and implementation – it remained a contribution to the literature of curriculum development. It was also one of the key approaches to curriculum development in Oman, pre-1994.

Curriculum Evaluation Theory

In addition to design and development, behaviourism has also provided approaches to curriculum evaluation. The term 'evaluation' has traditionally been associated with tests, marks, grades and teacher ratings. Evaluators were concerned with whether a student had passed a course or failed it or had gained the minimum knowledge required within a subject area or had met graduation requirements. At most, evaluators examined some specific subject area within a particular grade level.

Going beyond these parameters of evaluation, it has been suggested in several countries, including Oman, that all phases of the curriculum need to be evaluated, from the clarity with which goals have been defined to the extent to which goals have been achieved, the manner in which the programme has been implemented, the extent to which the curriculum meets the needs or expectations of the parents or the community, the extent to which the evaluation system corresponds with course content, the extent to which curriculum components are integrated, both vertically and horizontally, and finally, the attitude of students, parents, teachers and administrators to the curriculum initiative. This researcher notes that evaluation is a critical element of educational leadership and reform (Razik and Swanson, 2000). However, in the Arab world, as generally, curriculum evaluation has been less stringent than perhaps it might have been. Indeed as the curriculum reform process is developed, in Oman, evaluation will come to be seen as a central part of the reform programme.

Formative and Summative Evaluation

The distinction between formative and summative evaluation was introduced and elaborated by Scriven (1967) and Bloom *et al*, (1971). The difference between formative and summative evaluation lies in the use and timing of the evaluation rather than in the methodology or analytic techniques. Formative evaluation is used during the planning and

designing phases of curriculum development whereas summative evaluation is used after a curriculum development project is in operation (Scriven 1967, and Bloom *et al*, 1971).

Although curriculum evaluation has occurred in Oman, it has tended to be summative in format. This has meant that a rigid system has developed, with curricular review at the end of the academic year and little or no formal evaluation being done during the academic year. With the introduction of the new curriculum it may be that formative evaluation will come to be important. Indeed, formative evaluation may be used during three stages of curriculum development: (a) planning and designing; (b) implementation in sample schools; and (c) extension of the curriculum throughout the education system. At the planning stage, such evaluation assists in assessing alternative approaches. During the initial implementation stage, it can assist in appraising the views of people trying out the plan. During the dissemination stage, it can provide data regarding the impact of the programme on new populations. In Oman these stages were never considered prior to reform. Now there is an opportunity for carefully considered curricular development. Current education reforms emphasise this approach. Summative evaluation, in appraising a programme after it has been established, helps provide data needed for revising curriculum plans, formulating new ones, adding or dropping courses of instruction, selecting new content, and revising goals or objectives.

The utility of such an approach may come to be seen as crucial for efficacious curriculum implementation in Oman. However, in addition to the theoretical concerns surrounding curriculum evaluation one must also draw attention to certain models as they are discussed below.

Model of Curriculum Evaluation

A number of models of curriculum evaluation have arisen over the past half century. These have included the behavioural objective model the decision making model, Provus' discrepancy evaluation model, the accreditation model, and Stake's congruence-contingency model.

The behavioural objective model was developed by Tyler in the 1930s in connection with the Progressive Education Association's Eight-Year Study Programme in the U.S.A. Because Tyler defined education as a behavioural change in learners his evaluation consisted of measuring the extent to which such change had taken place. He distinguished three foci of evaluation: objectives, learning experiences and achievements (Tyler, 1949). This model remains dominant, particularly in the United States, because educational authorities require

requests for federal and state funding to include a statement of objectives along with procedures and instruments to measure their achievement. This model is particularly suited to summative or product evaluation.

One disadvantage of Tyler's behavioural objective model is the lack of a component for "formative evaluation" – one, might argue, is essential in the process of curriculum development. To remedy this deficiency, Stufflebeam developed an approach that incorporated formative evaluation called the decision-making model (Stufflebeam 1971:43). He defined evaluation as the process of delineating, obtaining, and providing useful information for judging decision alternatives. According to Saylor, Alexander and Lewis (1981), the decision-making model (CIPP) provides data regarding four stages of the development process:

1. *Context evaluation, which contributes to the definition of objectives.*
2. *Input evaluation, which is necessary for decision making on matters of design.*
3. *Process evaluation, which guides decision making on operations.*
4. *Product evaluation, which provides data for judging attainments, and, hence, for revision, termination, or continuation.* (Saylor, Alexander and Lewis 1981:302)

For each of the above stages, the following steps were to be taken in the process of evaluation:

- Determining what is to be evaluated and for what decision-making purpose.
- Determining the data required.
- Collecting the data.
- Defining the criteria to determine quality standards.
- Analysing the data in terms of the specified criteria.
- Formatting the information for decision-making.

It is important to note that the CIPP model does not include actual decision-making but only provides for collecting and presenting data and alternatives to the decision-makers.

Provus developed a version of Stufflebeam's decision-making model. He defined programme evaluation as:

> *The process of defining programme standards, determining whether a discrepancy exists between some aspect of programme performance and the standard governing that aspect of the program, and using discrepancy information either to change performance or to change programme standards.*
> (Provus 1971:183)

Provus identified five developmental stages associated with four steps in each of the three content categories that are essential components in evaluating an on-going program. The five stages are (a) design, (b) installation, (c) process, (d) product, and (e) programme comparison or cost-benefit analysis. The programme moves from one stage to the next,

identifying discrepancies. Once a discrepancy has been detected, the planner should revise the programme standards, modify the program, or terminate it. When the first four steps have been completed, the fifth step can be used to determine the cost benefit, which should lead to a decision whether or not to install the programme or find ways of economising.

Of a wide variety of evaluation models, Stufflebeam's and Provus' versions of the decision-making model have been seen to be valuable in curriculum evaluation, especially in the USA. However, their approaches may also be of interest to educational policy makers in Oman.

An essential part of evaluation is accreditation. Accreditation is a procedure to determine whether institutions of learning, whether at the university or pre-university level, meet certain standards, which may be determined by some private professional organisation or by some government body. The curriculum evaluation model generally used in accreditation procedures is a version of the discrepancy evaluation or decision-making models. Saylor and Alexander (1981) stated that:

> *Standards typically include items associated with context, such as statements of philosophy and goals, assessment of community needs and descriptions of students to be served; standards regarding input include qualification of staff, physical facilities, library resources, instructional resources and curriculum plan.* (Saylor and Alexander 1981:328)

Generally, evaluation is accomplished on two levels: (a) self-evaluation by participants in the programme or those immediately affected by it; and (b) evaluation by a team of specialists assigned by the accreditation association. Institutions failing to meet accreditation standards are generally given some period of time to resolve discrepancies. Institutions failing to do so may suffer penalties, loss of financial support, or, finally, dis-establishment. This is the case in the United States and in a number of other nations. However, it has not been the case in Oman. Their assistance in evaluation of educational systems is sought from external sources, such as UNESCO or individual consultants.

Accreditation can only be as beneficial as the standards established by the accrediting body. If such standards have not gone through proper evaluation procedures of their own, they may be limiting or counter-productive. Although accreditation procedures are widely acknowledged to have enhanced academic excellence, they may, on occasion, have the unintended consequence of stifling innovation.

In Stake's congruence-contingency model (1969) the evaluator is a co-ordinator of evaluations. He prepares a questionnaire soliciting opinions that are focussed on intended outcomes and actual results.

Similarly, Kliebard (1982) proposed that the purpose of curriculum theory as a study is to identify the principles which guide the decision-making process utilised in determining the content and structure of what is taught. Schubert (1986) identified three curriculum theory categories or orientations. They all come within the older, traditional and descriptive, behavioural curriculum theory. This has been derived from the natural sciences and positivistic philosophy, which relies on empirical data and theoretical constructs to define, describe, predict and direct curriculum development and design. Therefore, prescriptive curriculum theory utilises established norms to justify the content and activities found in a curriculum.

The relevance for Oman of the above outlines may be seen when one turns to the situation of curriculum change. In making a choice between the curriculum evaluation models presented above, the most important factor to consider is the purpose of the evaluation especially in Oman where educational change has occurred quickly. Tyler's model most efficiently measures the achievement of curriculum objectives; the accreditation model best meets the needs of institutions needing to qualify for accreditation; Stufflebeam's decision-making model generates formative evaluation data.

As noted at the beginning of this chapter, the behaviourist approach has come under profound criticism in recent years. This has been due, in most part, to the impact of globalisation on the curriculum.

It has been seen in the first part of this chapter that traditionalists have dominated curriculum theory with quantitative research methods (controlled empirical inquiry using defined variables). However recently, qualitative inquiry methods (ethnographic, participant observations, from the perspectives of sociology and history) and action research utilised by practitioners to solve problems encountered during classroom practice have all gained in importance. It has been argued that the educators' flexibilities and their abilities to apply these varied research tools to curriculum problems may enhance progress in the field of education (McNeill, 1985).

The manner in which curriculum now comes to be discussed tends to be through approaches to innovations and implementation. It may be seen that design, development, implementation, evaluation and innovation of the curriculum have been re-contextualised and re-theorised through the lens of constructivist psychology, critical social theory, and through the requirements of globalisation with attendant economic and political formations. It will be seen that all these come to impact upon education.

The following section at these approaches to innovation and focuses specifically upon innovation at regional and local levels. It then address four models of curriculum implementation: the staff line model, the grass root model, a demonstrative model and the

action research model. It will be seen that all four are part of a more international and outward looking approach to curriculum design and development than has been the case with the more inward looking and technicist, behaviourist approaches.

To the end of providing an understanding of the contribution constructivism has offered for Oman's education system, the following pages will delineate various approaches and models, which fall within this constructivist perspective.

Curriculum Innovation

The basic concern of educational change is to move schools to meet their goals more effectively. A variety of terms have been applied to change in education (innovation, reform, educational development, restructuring, and renewal are examples). For the purposes of this paper, educational reform will be defined as change intended to produce improvement across the entire educational system and generally initiated from the decision-making centre of the system (Sack, 1981).

The processes of educational reform have been described by many writers and researchers. Fullan has summarised a number of studies of change as showing three broad phases to the process. Phase 1, which Fullan called "initiation, mobilisation, or adoption", includes the processes leading up to and including the decision to make a change. Phase 2, was called "implementation or initial use", and includes the first attempts to put the reform into practice. Phase 3, "continuation, incorporation, routinisation, or institutionalisation", includes decisions and actions that incorporate the change into the current system or allow it to disappear (Fullan, 1991). To his discussion of these general perceptions, Fullan added a fourth element, outcome, which defines the goals of the proposed changes and serves as a measure to determine its persistence or elimination.

Successful educational change, Fullan believed, incorporates six elements that he called themes (Fullan, 1991). These elements are a) vision building, or developing a new perspective of what the organisation should do and how to reach that new perspective; b) evolutionary planning, or adjusting initial planning to take advantage of opportunities as the process goes along; c) initiative-taking and empowerment, which involves finding persons who will act to implement the new vision and giving them the power to act; d) staff development and resource assistance, which enables those who participate in the change process; e) monitoring the change process and solving problems as they arise; and f) restructuring the organisation to accommodate the educational change.

Educational reform has been a worldwide concern in the latter part of the 20th century in both developed and developing nations[4]. While the reasons for reform have varied from instance to instance, the effort has been international, as attested to by Adams and Chen (1981), Davies and Hentschke (1992), Conley (1993), Fagerlind and Saha (1995), and Fullan (1992, 1991).

Reviewing education reform programs in the primary schools of Ethiopia, Baizen (1994) ascribed success in the project to a number of elements. These are important for this study of Oman's curriculum reform programme. He cited commitment to the project and assistance provided by the Ethiopian Ministry of Education, a consequent sense of expectation on the part of educational staff, monitoring of the process by Ministry personnel, empowerment of staff, adjustment of the changes to meet local conditions, community support, and building upon success as contributing to effective change where it was experienced in the Ethiopian primary schools.

However, to reach for change within the school system is not enough in and of itself. Baizen's (1994) citation of community support as a significant element in successful educational reform is key. Since the educational system exists to meet broad community and national goals, reform efforts must be embedded in a context of support from other systems within the society. King, reviewing educational change in South Africa, cited the necessity of policy coherence: policy in one sphere being reinforced by policies elsewhere" King (1998:4).

The literature of educational reform draws close links between educational reform and socio-economic change in a given society or nation. (See Conley, 1993; Dalin, 1998; Fullan, 1991; Merritt and Coombs, 1997; Sack, 1981.) The national system, therefore, provides a context for educational reform to take place.

Given this background, it can be seen that theorists considering educational reform, fall generally into two camps (Paulston, 1976). Paulston notes that these two refer to writers viewing reform as based on equilibrium and those viewing reform as based on conflict. The equilibrium perspective assumes a consensual society operating according to homeostatic principles. Educational reform is then seen as a series of movements to adjust imbalances in the social system. A goal is maximisation of the efficiency of the educational system. The conflict perspective assumes inherent instability in the social system, with consequent natural conflicts over values, resources, and power. Educational reform is then seen as an

---

[4] The types of reforms and programmes from international education agencies e.g. Education for all (EFA) by 2000 (Thailand 1990) and by 2015 (India 2000), Jomtien 1990, Dakar 2000.

ongoing natural process among groups whose interests are in conflict. In Oman, these interesting discourses are particularly relevant in a country such as Oman. Traditionally, Oman's educational system has been seen to exist within a consensual approach with equilibrium as a dominant characteristic. As Al-Hammami (1999) notes, in late 20th century there come to be a number of competing demands and interests so that what, at one time was one overall objective and even one approach to its successful complementation, now by 2000, Oman may be characterised as having a number of comparing objectives. A goal is adaptation to the needs of the people and the state (Al-Hammami, 1999).

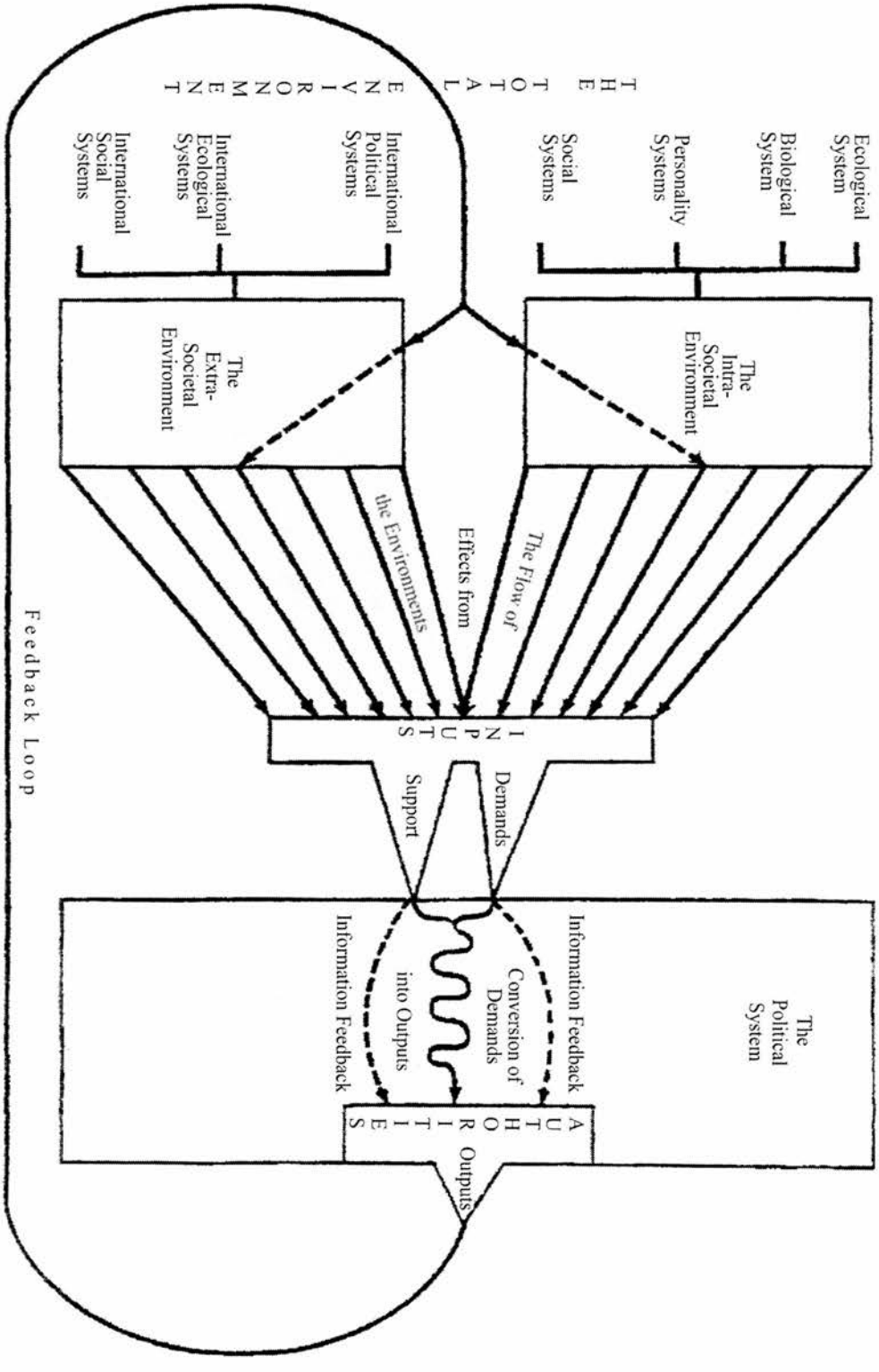
In Table 2.1 (overleaf) one can see that there are variations within the two perspectives

Table 2.1. A dynamic response of political system from Paulston (1983)

Illustrated Linked Assumptions Concerning Educational-Change Potentials and Processes					
Paradigms	**Theories**	**Re Preconditions for Educational Change**	**Re Rationales for Educational Change**	**Re Scope Process of Educational Change**	**Re Major Outcomes Sought**
Equilibrium	Evolutionary	State of evolutionary readiness.	Pressure to move to a higher evolutionary stage.	Incremental and adaptive; "natural history" approach.	New stage of institutional evolutional adaptation.
	Neo-Evolutionary	Satisfactory completion of earlier stage.	Required to support "national modernisation efforts".	"Institution building" using Western models and technical assistance.	New "higher" state of education and social differentiation/ specialisation.
	Structural Functional	Altered functional and structural requisites.	Social system needs provoking and educational response; exogenous threats.	Incremental adjustment of existing institutions occasionally major.	Continued homeostasis or moving equilibrium human capital or national development.
	System	Technical expertise in system management. Rational decision-making and need assessment.	Need for rater efficiency in system operation and goal achievement; i.e. response to a system malfunction.	Innovative problem solving in existing system: i.e. research and development approach.	Improved efficiency re cost/benefits; adoption of innovation.
Conflict	Marxian	Elite's awareness of needs for change; ore shift of power to socialist rulers and educational reformers.	To adjust correspondence between social relation of production and social relation of schooling.	Adjustive incremental following social mutations or radical restructuring with Marxist predominance.	Formation of integrated workers, i.e. the new "socialist man".
	Neo Marxian	Increased political power and political awareness of oppressed groups.	Demands for social justice and social equality.	Large-scale national reforms through "democratic" institutions and processes.	Eliminates "educational privilege" and "elitism" create more equalitarian society.
	Cultural Revitalisation	Rise of collective efforts to revive or create a new culture. Social tolerance for deviant normative movements and their educational programmes.	Rejection of conventional schooling as forced acculturation. Education needed to support advance towards movement goals.	Creation of alternative schools or educational settings. If movement captures polity, radical change in national educational ideology and structure.	Inclusive new normative system. Meet movement's recruitment, training and solidarity needs.
	Anarchistic Utopian	Creation of supportive settings; growth of critical consciousness social pluralism.	Free man from institutional and social constraints. Enhance creativity new for life-long learning.	Isolated "freeing-up" of existing programmes and institutions, or create new learning modes and settings: i.e. a "learning society".	Self-renewal and participation/ Local control of resources and community; elimination of exploitation and alienation.

Sources: Conflicting theories of Education Reform. In Simmons, Johns (eds) Better Schools: International lessons for reform. New York: Praeger Publishers.

Figure 2.1 A dynamic response of a political system from Easton (1965)



Sources: A system analysis of political life. New York: John Wiley & Sons, Inc.

Further, the Reform in Oman has the characteristics of an equilibrium paradigm based on a neo-evolutionary theory. It is imbedded in a series of reforms begun in 1970. The primary rationale for the reform effort is to bring Omani citizens and the Omani society into the 21st century, to be able to compete with other nations, including other Arab nations, on an equal economic and technological basis. It attempts to achieve this through using Western models and assistance as shown through the extensive use of consultants and expatriate employees. Educational is, indeed, within a wider context.

The concept that successful educational reform is imbedded in a broader context was explored by Easton (1965) [Figure 2.1]. He established a model focusing on political and social contexts. The key elements of this model are (a) the political system, a set of behaviours resulting from interaction with other systems; (b) the social system, the total context in which the political system exists; (c) responses to the influences exerted by the environment on the political system; and (d) feedback, which serves to keep reform moving in the appropriate directions. The social system consists of the intra-social environment or nation environment, and the extra-social environment, or global society. Various influences from the total environment are inputs to the political system, expressed as wants. Ultimately these wants may be converted to demands. The demands are converted to system outputs by authorities, and the result is monitored through feedback.

Therefore curriculum reform can take a number of different shapes and be driven by different agendas at various points in time. One such reform is the Standardised Curriculum (SBC) currently being introduced in Oman. Like the Outcomes Based Education (OBE) system being introduced in South Africa, there are immense pressures on all parts of the education system and varying approaches to the support needed for the introduction of this reform. Both SBC and OBE focus on organising an education system around what is essential for all students to be able to succeed at the end of their learning experiences. This means starting with a clear picture of what is important for students to be able to do, then organising curriculum, teaching and assessment to make sure this learning ultimately happens (Gultig *et al*, 1998). The introduction of Standards-Based Education[5] is interesting because it enables theorists to study the meaning and impact of such change. Indeed, it requires changes in the way curriculum is defined, instruction delivered, and performance assessed. A comprehensive understanding of innovation in curriculum development in relation to political, administrative, organisational and educational dimensions may be achieved by examining how innovation is implemented at the national, regional and school

---

[5] SBE, like OBE, owes its origins to a number of writers, educational practitioners and educational administrators. Notable amongst these has been Dr W. Spady (American Association of School Administrators).

levels. This discussion has been undertaken in a number of national settings. It is argued here that such a focus may now be useful for an understanding of what is happening in Oman.

For this discussion, "curriculum innovation" is defined as a deliberate attempt to improve practice in relation to certain desired objectives. The term "strategy" is a broad concept meaning all available procedures and techniques used by individuals and groups at different levels of the educational system to reach desired objectives. Innovation in curriculum refers to a deliberate attempt to improve the teaching-learning process, its aims, content, methods, evaluation, materials, and the internal organisation of instruction. Four categories of educational innovations have been identified by Bennis, Benne and Chin (1969). These are:

1. objectives and functions, (concerned with viewing the school in a broad social and economic context);
2. curriculum development, (concerned with the teaching-learning process;
3. organisation and administration concerned with the entire educational system); and
4. roles and relationships, (concerned with role definition and role relationships).

Strategies used to implement these four categories may be classified by these researchers as empirical-rational, normative-re-educative, and political administrative. A process-oriented model, the planning-process-development-diffusion model (PRDD model), which takes into consideration the four categories as outlined above, may been seen as helpful for an analysis of the curriculum innovation process in Oman.

Education innovation at the national level

At the national level, as has been practised in the Sultanate of Oman, concern is focused on the educational system as a whole and its related needs. Innovation may occur as a means for serving political objectives, as a response to crises, or as a systematic research and development process. Because national centres have established organisational structures and relationships, they do utilise components of the model. Most national centres, including Oman, use a combination of strategies. Political-administrative and empirical-rational strategies predominate and may be used to reinforce each other, while normative-re-educative strategies are used infrequently. An area of weakness is problem identification, which is more political than empirical and inadequately administered.

Innovation at the regional level

Although regional centres – in Oman these are districts – do not generate innovation, implementing innovation to improve practice is a major concern and activity. As a link between national and local centres, regional centres assume a middle management role utilising internal and external resources for innovations. Performing initiating and service roles, regional centres seldom employ formal evaluations; in fact, few innovations at this level resemble the planning-research-development-diffusion model. A key element in regional strategy is the use of information and external experts. Empirical-rational and normative-re-educative strategies support innovation efforts, which rely on advisors and consultants as change agents. In the last ten years, Oman has encouraged such approaches but has not been able to achieve them. This may be seen as detrimental to the efficacious implementation of an innovation such as curriculum reform.

Innovation at the school level

Taking into consideration the complex social interactions of schools, the importance of school culture, and readiness to innovate, innovations at the school level were found to involve new decision-making structures, instructional strategies, student grouping strategies, or subject-specific curriculum innovations. Where schools were experimenting with instruction and evaluation changes, it appeared that traditional external controls (examinations) were supplanted by local control mechanisms (parents). In Oman innovations adapted by schools were openly discussed and critiqued by internal and external stakeholders. The reforms of 1995 emphasised this approach.

Although formal evaluation is not present, process evaluation does take place. Leadership, decision-making and problem-solving ability, and consensus building among all involved parties are critical to successful adoption of curricular innovations. Although schools work within similar external (regulations, financial) and internal (philosophical, group climate) constraints, there is flexibility to choose the innovations they feel best fit specific needs. The functions of schools are determined by societal expectations and hierarchically imposed regulations; therefore, individual schools exercise autonomy over how, not what, innovations are implemented. However, this has not been practised in Omani schools, where there has not been any autonomy over how innovations have been implemented.

Given the foregoing, one might ask to what extent can individuals influence, participate in, and learn from the process of educational innovations? Teacher participation, critical to successful innovation implementation, varies among countries. In schools where teachers control innovation, most innovations are related to "curriculum" and do not threaten as subject matter or alter teacher status or roles. However, because teachers' perceptions of schooling and curriculum are limited to the classroom, their dominant role in innovation may prevent implementation of practices that may be more effective, both in the short and in the long term.

It may be seen that student participation in innovations and curriculum development has direct impact on the design, structure and results of an innovation. At the local level, local professional groups' influence and control of innovations neutralise other groups such as (students, parents, local community). They may view these innovations and their implementation differently. In Oman, leadership plays a critical role because these administrators usually control the information and knowledge relevant to innovations that enter schools.

Models of Curriculum Development

In addition to models of innovation, models of curriculum development have also impacted upon Oman's curriculum reform. For the purpose of this thesis, one may delineate four models of curriculum development.

The Administrative Bureaucratic (Line – Staff) Model

This model, which uses top-down line-staff procedures, is usually initiated by a top-level official – a superintendent of education in the decentralised education system of the United States or a Minister of Education in the type of centralised education system used in many developing nations. This model of decision-making is used in many Arab countries, including the Sultanate of Oman. When a programme of curriculum development is necessary, meetings are arranged with key subordinates, steering committees to formulate general plans, develop guiding principles and prepare a statement of philosophy and objectives for the entire school system. This committee also may provide for the selection and organisation of ad hoc working committees to formulate plans, principles and objectives for the curriculum, content and learning activities.

The committee structure is an important feature of educational policy making in Oman. First, curriculum initiatives are pencilled in by working committees. Then such proposals are reviewed by steering committees to ensure that they conform to guidelines

regarding policy, scope, form and style. The steering committee may supervise the implementation of the curriculum or appoint another committee to accomplish this task. This approach was adopted in the development of the revision of the science and modern mathematics curricula in Oman during the 1993-94 period.

In the implementation phase, the committee acquaints the personnel who were not engaged in the production of the curriculum with its philosophy, goals and objectives, as well as the proposed methods of implementation. The last task of the steering committee is to monitor the effectiveness of the curriculum through visits to schools, discussions, or pupil evaluations. According to the results of the monitoring process, modifications may be made in the curriculum.

The administrative model has been criticised for being undemocratic, ignoring the complexities of change in people and underestimating the time required to implement reform. Zias (1976) criticised the uniformity assumption of the administrative models where the curricular change takes place uniformally at a given time throughout the school system. He stated that as experience in curriculum development increased, the concept of change on a "uniform front", was one of the points at which radical modification occurred. Thus there developed the concept of change on a "broken front". The administrative model in its pure form is rarely advocated by curriculum specialists, yet many school systems use it with varying degrees of authoritarian nomenclature to accomplish the task (Bush 1993). This was the case in Oman because Omani education was based historically on a top-down model. However, it is expected that the RDGE, once implemented, will bring a change in this approach.

The Grass Roots Model

In contrast to the top-down structuring of the administrative model, the grass roots model employs a "bottom-up" structuring. This is discussed by Smith, Stanley and Shores (1957). Changes are initiated by teachers in the individual schools, which employ group or democratic methods of decision-making and consult all parties directly involved in the curriculum. These may include students, parents and other members of the community. In Western nations (such as the United States and the United Kingdom) this approach has proved useful; it has gathered interested parties around the innovation from an early stage.

The importance of the teacher in effective curriculum engineering is based on many assumptions. In the report by Smith, Stanley and Shores (1957).

- The curriculum will improve only as the professional competence of teachers improves.

- The competence of teachers will be improved only as the teachers become involved personally in the problems of curriculum revision.
- If teachers share in shaping the goals to be attained in selecting, defining and solving the problems to be encountered, and in judging and evaluating the results, their involvement will be most surely assured.
- As people meet in face-to-face groups, they will be able to understand one another better and to reach a consensus on basic principles, goals and plans.

The grass roots model was criticised by Razik (1974), an international education consultant based in the United States of America, who observed that:

> *The primary weakness of the grass-roots model of curriculum engineering is that it applies the method of participatory democracy to a highly technical, complex and specialised process, a one man – one vote rationale will not necessarily result in good decision making in situations where it is necessary to bring to bear the authority of specialised knowledge.* (Razik, 1974:11)

In Oman this may indeed become a problem, should one adopt a grass roots model. However it may be seen that the grass-roots model has contributed immeasurably to broadening the base of curricular decision-making and to increasing the responsiveness of curricula to community needs. In Oman these are (or may become) highly valued aspects of policy implementation. A broadened decision-making base can be made most effective if the qualifications of the participants are taken into account when considering decisions and when recommendations come to be made.

The Demonstration Model

This model concentrates on the implementation phase of curriculum development. Because curriculum changes may be perceived as threats to the security and status of people affected by them, advocates of the demonstration model support the introduction of changes gradually or initially on a small scale.

It may be compatible with either the administrative or the grass-roots models. That is, initiatives for this model may come from the top down or the bottom up. Smith, Stanley and Shores (Fullan, 1994) identified several advantages to the demonstration model:

- The new curriculum undergoes testing in a protected, experimental situation, where its strengths and weaknesses can be determined.
- Changes are introduced in specific workable segments, which tend to mitigate the resistance, which often develops to proposals for system-wide revisions.

- The small scale of this model facilitates the broken front approach that avoids the hiatus between document production and implementation inherent in the full-scale administrative model.
- The demonstration model, in particular in its grass roots form, capitalises on the initiative and resourcefulness of teachers and gears the administrative resources to their needs and interests.

It has been pointed out that the demonstration model, of itself, may not entirely alleviate concerns or antagonisms on the part of teachers not participating in the experimental process. In Oman, the history of absence of teacher involvement may make this less of a problem. Indeed, it may be argued that the Omani teaching staff have not been involved because the expatriate teachers do not feel a sense of ownership of the system, and native Omani teachers have not had experience in such involvement.

Action Research Model

At this point, it may be important to elaborate upon another mode of teacher involvement in the learning process. Since 1957, when Smith, Stanley, and Shores generated their "Systematic Action Research Model" there have been a number of developments, most recently, action research which has become an approach to curriculum development[6].

One may support the view (Smith, Stanley and Shores, 1957) that curricula exist within an extensive web of expectations, on the part of administrators, parents, teachers and students as well as the entire community. Effective curriculum design, it is suggested should provide some mechanism to ensure that these group perceptions be considered. Action research provides a means of solving problematic situations where numerous factors are involved.

> **Razik (1974) observed**
>
> *... that while action-research is a highly democratic approach to educational reform; it is a far cry from the laissez-faire looseness of the grass-roots model. It may be argued that the action-research approach is highly suited to standards based education reform because it is able to take into account the complexity of initiating such a reform while allowing flexibility in addressing the multiple actions and reactions caused when a standards-based curriculum is developed and implemented simultaneously at the national, regional, and local levels of the educational system. It is a dynamic model that would help Oman to move from the administrative model of management toward more co-operative styles of implementing the major concepts of educational reform.*

---

[6] This will become an important issue when the research is discussed in detail in Chapter 5 "Methodology".

However, elements of the change process, if not applied appropriately, may cause unintended effects. Many writers suggest that conflicts and tensions in systems precede meaningful changes (Fullan, 1982). These authors argue that creativity and tendencies toward regulation and systematic patterns, contradictory conditions, are necessary for successful change to occur. Evaluation, also critical to success, may be ineffective if applied incorrectly. Participants may experience barriers to change that may belong to any of the following categories:

1. value conflicts – change in educational social, political, or economic objectives;
2. power conflicts – redistribution of power;
3. practical conflicts – inability to substantiate innovations or their results; and
4. psychological conflict – fear of the unknown (Fullan, 1982).

It is also pertinent to point out here that organisational and cultural structures of educational units can adversely or positively effect the implementation of innovations. Therefore, it is very important for innovators to consider the internal ideology of organisations as well as the broader external social context. This is particularly the case in countries such as Oman where curriculum innovations are not necessarily indigenous, but imported from elsewhere.

Analysis of the process of innovations generally, throughout a system, reveal that varied roles exist at each level: at the national level – initiation, development and evaluation; at the regional level – linkage; and at the local level – practical problem solving. It may be argued that, in the light of these concerns, innovations that alter educational functions benefit from centralised control; innovations that deal with organisational development or human/role relationships benefit from decentralised control. Therefore, educational systems, as in the case of Oman, may need to vary the types of control, authority, and decision making situationally to achieve desired results.

It may become important to note that in Oman, at the national level, purpose and functions of education must be continually monitored and revised in relation to current social and economic conditions so that regulations and policies remain relevant and effective. Locally, educational agencies need to develop policies and practices aligned with national goals. In line with the case made for decentralisation earlier, regional/local structures, such as teachers centres, or national information dissemination networks, can support and encourage change. In Uganda, for example, teachers' centres have become an important agency for implementing decentralisation of the secondary curriculum (Donn, 1998).

In the Arab world, for example in Jordan and Egypt, the process of innovation has been viewed as one process rather than as three distinct but related processes. National

innovation and curriculum development centres concentrate on planning, initiating and developing innovations for the entire educational system and are not concerned with the operational teaching-learning processes. Regional centres are concerned with developing internal capacity and gathering external information to improve schooling for everyone in the region. Local centres concentrate on daily curriculum and instruction tasks/strategies to improve student performance. Although these three levels provide different perspectives on innovation, they all employ problem-solving techniques to adopt, adapt and implement innovations.

Given the above concerns one might wonder whether, in Oman, there are levels that are optimal and at which innovations should be formulated, adopted, developed and implemented. When considering the social and economic implications of policy formulation and adoption, it is often the case that educational constituencies at the national level influence the adoption of laws, regulations and financial supports. The development stage comes to be operationalised at the regional level. Implementation takes place at the local level mainly through the dissemination of information, particularly formal training and electronic communication media. However, the vast distance, created between the national and local levels may create barriers because local practitioners have no ownership or understanding of the changes or their relevance. It may be argued that these information dissemination/communication problems are actually problems of providing appropriate decision-making participation by all involved parties. Local centres contend that because they are instrumental and directly participate in the teaching and learning processes, they should also be involved in the decision-making and implementation stages of innovations.

Therefore, dramatic changes in the management, organisation and role relationships existing in local centres may be necessary. Central and external authority structures may need to be modified or changed. Curricular changes usually imply behavioural changes (value and/or technical). However, it has been argued that except for purpose or function considerations, curriculum innovation is most effective for teacher acceptance when decision making, problem solving, and implementation is decentralised. These actions do not necessarily mean that practices adopted are the most beneficial. National requirements, examinations, quality and equity issues, and financial regulations impact upon local authority. These provide a framework within which local agencies operate.

It can been seen, therefore, because of size and complexity, social, economic educational issues of an educational system, multiple strategies at all levels may be necessary to effect changes. Since each country has its own unique organisational structures, one structure for educational innovation cannot be prescribed. Because of the dynamic character

of change, education and innovations should be monitored continually and adapted to meet external and internal conditions.

In many countries, piecemeal reforms have been found to be ineffective. A National Curriculum Innovations Policy may be needed to redefine education – its purpose, goals and functions – and to shape laws, regulations and requirements that could promote and support innovations. The Omani National Policy is not to direct and control changes but to set conditions for curriculum innovations. Local curriculum policy is necessary to continue the dialogue of innovation, encourage problem solving, and continual learning and improvement. Regional centres may need to take an active, major role in providing supports – knowledge, expertise and experimentation – and to develop communication links among teachers regionally. National information centres can electronically link all participants in the educational system and provide instantaneous access to research and practices, thus increasing the knowledge, power and capacities of all participants. It is argued that by participating in decision making at all levels, participants will be motivated and conditions for communication will exist. Each country must assess its own needs and conditions to determine the best structure and mechanisms for innovation. This applies no less to Oman than to the many northern and western countries usually seen as suitable subjects for analysis or examination.

In Oman, therefore, at the national level, curriculum innovations are related to policy issues. However, these activities are not consistent among agencies and may vary in degree of influence over innovations. It is hoped that as local schools assume a greater knowledge role in research strategies, they can exercise informed criticism to assess the benefits of innovations.

Ultimately, Oman intends to undertake a thorough appraisal and evaluation of its curriculum reform and to ensure that a Standards-Based Curriculum addresses the needs of students and society. Further, it is important to recognise that when the curriculum is implemented, it does achieve the intended goals. It is anticipated that. It will require continual monitoring, evaluation and adjustment at all levels – national, regional and local. Although geographical distances in Oman create certain problems with day to day monitoring and evaluation, generally efficacious reform requires a programme and timetable for evaluation. Internal formative evaluation may aid focusing and maintaining progress toward successful implementation by quickly identifying and solving problems that may arise. Summative evaluation of curriculum implementation and student performance data may determine the level of success of the entire process. This would allow all levels of the educational system in Oman to be informed about what progress has been achieved and what yet needs to be done to ensure successful implementation.

Given this background, Chapter Three will review the history of education policy reform in Oman delineate and approaches to traditional curriculum design and development. How these traditional approaches have been applied to Oman will be discussed. In Chapter Four the implications of the new Standards-Based Curriculum. will be examined in the context of more general education reform. In particular, it will be noted that to implement a standards-based curriculum successfully, Oman's traditional approaches to curriculum and educational management need to be re-examined, modified, and, perhaps, replaced with strategies consistent with standards-based initiatives. These issues especially those connected with education leadership and management of reform programmes, will be addressed in Chapter Four. Hopefully this discussion will reveal where Oman is now, where it hopes to be when curriculum reform is achieved, and how these educational reform efforts will contribute to Oman's ability to position itself favourably in a global context educationally and economically.

Chapter Three

The Omani Education System – History, Modernisation and Reform

In the previous chapters it has been noted that there have been considerable changes in the philosophical social and political principles underlying the curriculum in Oman's recent past. Part of this change has been due to the pressures of internationalisation, a "globalisation" of education and of the curriculum in particular. This, it is argued, has been a contributor to the introduction of a standards based curriculum.

In light of this radical alteration in Oman's education policy background this chapter will outline the recent historical development of primary, secondary and higher education but will focus particularly upon curriculum reform.

The chapter will discuss the history and current status of curricular development in the Sultanate of Oman. It will focus on the curriculum as the medium of evaluation. It will include a discussion of the Islamic influence in Oman, the initial phase of formal education development, and the extensive revision of the Omani education system. Further, Quaranic and government schools will be reviewed, so that current plans to improve the Omani educational system through the 20:20 Vision plan will be contextualised and considered.

Islamic education in Oman has not been replaced by the current educational reforms. It is basic to the reform movement that the Islamic curriculum is an integral part of the reformed curriculum. To understand this, a discussion of the development of traditional Islamic education in Oman will be helpful.

When schooling began in Oman is difficult to pinpoint and describe. The Prophet Mohammed is said to have sent a messenger to call the people of Oman to Islam (Ministry of Information, 1987). People would come to learn and memorise the Qur'an and Hadith. The aim then was that all might learn to live as devout Muslims.

Traditional education in Oman took the form of Qur'anic schools or "Kuttabs" (the traditional word for religious schools). Traditional Qur'anic schooling has been conducted in three places, either in the teacher's house, under trees, or in the mosque. Teachers were male or female unless the school was located in the mosque, in which case teacher was male. The teaching was repetitive, because the teachers were themselves products of the kuttab schools.

These schools started in the Islamic world many centuries ago. A single teacher taught the Qur'an and sometimes basic writing skills. When Qur'anic schools began in Oman is not precisely clear, but since the Omanis adopted Islam in about 632 A.D., it is possible that they

started shortly after that time. The kind of education that was taught in the Qur'anic schools took place on three levels: a basic level, a secondary level, and an advanced level.

Basic level

Both male and female students attended the basic level between the ages of six and twelve. The basic level was taught in almost every town and city. These schools taught mostly religious subjects, reading and reciting the Qur'an, basic writing, and the fundamentals of Islam. Some of these schools also taught basic mathematics. Students were given rudimentary instruction in reading and writing. The emphasis was on memorising the Qur'an with other subjects as a by-product (Mertz, 1972).

Some of the classes for males were held in the mosque, with students in the courtyard. Most of the schools were located in the teacher's home, however, and all students, both boys and girls, studied together in one large classroom. All the students sat on the floor in front of the teacher, who sat on a raised dais. The curriculum was almost the same except that in the interior of Oman there was a focus on the study of grammar. Recitation was the only method used in these schools. The teachers taught Arabic grammar and syntax – also writing – through recitation of the Qur'an.

Expenses were low. However, teachers did not depend on payment or salary, but on gifts from the students' families. The greatest amount of money was given to the teachers at the students' graduation. By graduation day students needed to have completed reading the thirty chapters of the Qur'an and to have memorised and recited some of the chapters.

Secondary level

The secondary level of the Qur'anic schools was attended only by male students aged approximately 12 to 20. The emphasis was on learning to speak, read and write Arabic. They also studied fundamentals of Islamic Law (Mertz, 1972). On this level teachers almost always used the same methods, techniques, and curriculum for instruction. The students studied the Qur'an as well as basic literacy and knowledge of the religious foundations of Islam. Some schools on this level used other Islamic textbooks besides the Qur'an. Most of the main cities had schools on this level.

Advanced level

The third level of the Qur'anic schools was an advanced level, which offered more advantages to the students. This level was available only to males who were successful at the

secondary level. Not many students attended these schools unless they were academically able and economically successful and had a desire to continue their education. This advanced level was for men up to about thirty years of age. It was open only to those who were able to afford the time away from gainful employment. It prepared those who successfully completed the course for appointment as judges throughout the Sultanate (Mertz, 1972). The advanced level schools were uneven in prestige and quality and were not available in many Omani cities. The curriculum, although varied, could be divided into three categories: Islamic law, Arabic language and science. Under Islamic law students learnt the Shariah, Hadith, Fiqh and Tafsir (explanation of the Qur'an by various Islamic scholars). Under Arabic language students learned Arabic literature, ancient and medieval poetry, grammar, speech, rhetoric and Islamic history. Under science, students learnt mathematics, physics and astronomy. Rustaq, Izki and Nizwa were traditionally considered cities of learning and had advanced schools. Historically, Omani from these cities were well educated in the classical Arabic language and Islamic law.

There was no limit on how long one could study in the advanced schools. Teachers and students decided when they were ready to complete this level. The graduates of this level received great respect. Some students became judges. Some students pursued further independent study in such subjects as the Shariah, Fiqh, Arabic literature, history, poetry and philosophy. Those students who were more ambitious in their studies travelled to famous institutions of learning in the Arab countries such as Egypt, Iraq, Syria and Morocco, going on to become scholars in various subjects.

The Western influence, particularly that of the French, upon Arab countries stems from the Napoleonic period. More modern educational systems were brought from Egypt and the Ottoman government and subsequently by Christian missionaries (Qubain, 1966). During these periods, schooling in village-based schools progressed from primarily religious content to include language, writing skills, history, geography and mathematics.

In the 1870s a few more formal kuttab schools were formed, including the Alkur Mosque School, the Al Zawawi School, and the House of Shaik Rashid bin Aziz Al Kusabi. These began the movement toward a modern educational system. However, the kuttabs were the only educational system in place in Oman until the 1940s (Al-Hammami, 1999).

While various Sultans gave greater importance to schooling throughout the later 19th and early 20th century, little thought was provided to overall curriculum design or to the formalisation of education. Early Sultans seemed solely concerned with additional instructional requirements.

From 1932 to 1970 education in Oman began a very slow transformation. Three primary schools were established – in Salalah in 1937, Muscat in 1940, and Matrah in 1959. In the 1940s Sultan Sayyed Said bin Taymoor modernised the schools in Muscat, Salalah, and Mutrah. All were al-Sa'idiyyah schools (named after the ruler of the time). These schools were limited to 900 male pupils, and conducted instruction at the primary level without age limitations. During this time, the kuttabs remained the dominant educational system in the country (Al-Hammami, 1999).

The administration, organisation, and curriculum of all three were almost the same. English was taught from the first grade. Although Qur'anic schools had been coeducational, these schools were for boys only, with a room for each grade level.

These changes notwithstanding, nearly all of the schooling within Oman was still largely accomplished in the Kuttabs and utilised a combination of materials and methods obtained locally and from the Qatari educational system. Most Omani students before the early 1970s went to a variety of countries, including Qatar, Egypt, Syria, Bahrain, Saudi Arabia, Kuwait, Iraq, Germany, France, Poland and Hungary. These countries opened their doors to Omani at all levels.

In 1971, the Ministry of Education approved 685 scholarships for overseas study, mostly at or below the university level. Also there were approximately 1,000 Omani studying overseas without scholarships (Statistical Yearbook 1984-5, Ministry of Education, 1985) Omani wishing higher education or technical education went primarily to some Arab countries, the Soviet Union or Europe.

In addition, some Omanis who lived and were educated in Zanzibar (formally under Omani influence) with their families became better educated and when they returned to Oman in the mid 1970s they took an active role in the country's affairs.

The impact of this foreign training was to introduce western-educated Omanis into the society, where they exerted influence. However, Oman had still not committed itself to developing its own unique educational system. It was not until 1970 that the Omani educational system began the enormous expansion notable today. Prior to the early 1970s Omani students studying overseas outnumbered Omani students studying in Oman except at the primary level. At the primary level there were only 3 schools[7].

---

[7] The researcher and many other Omanis studied abroad for Primary level schooling (as well as for Intermediate and Secondary). In most cases this was due to family commitments outside Oman and also due to the lack of schools within Oman.

Sultan Qaboos, the current national leader, focused on education as a major goal upon his ascent to the throne in 1970. He called for development of a national educational system that would enable Oman to compete successfully in the current world economy. Goals, statements and policies for administration, curriculum development, assessment, teaching, and language as a medium of instruction all had to be developed. Between 1970 and 1995 all of these tasks were undertaken, and a modern Omani educational system was brought into being (Al-Hammami, 1999).

In the early days of the reign of Sultan Qaboos he directed that Omani education be "Omanised" (Ministry of Education, 1978). Since that time, educational development has witnessed several distinctive stages. The first, from 1970 to 1975, simply aimed to provide opportunities for children to enrol in schools. The priority was to increase the number of schools so that an education would be available for all. In 1970 thirteen new schools were added to the existing three primary schools, making a total of 16. Nine were in the capital district. Twelve were for males, three for females, and one coeducational. The new educational programme was simplistic to a large measure, with its emphasis centred on the structural aspects of creating an educational system. Western model curricular resources were not generally available and funds were limited for their development. Therefore during this time Oman government schools used a package of textbooks and other teaching materials, including curricular materials, from neighbouring Qatar, and also used in Kuwait, where there was a western-style curriculum similar to that in Egypt. The materials and texts were made available free of charge.

However, these textbooks reflected neither the culture, the economic conditions nor the philosophy of education needed in Oman. Instead, they imported a curriculum with goals and aims designed for other countries. At first Oman attempted to modify the Qatari texts and materials. However, it soon became apparent that it would be necessary to design a fresh curriculum consistent with the aims and priorities of the national development of Oman.

When the Omani educational system was expanded in the later 1970s, there were very few Omanis who were qualified through experience and education to take responsibility for the new schools. Therefore the authorities sought assistance from other Gulf States and Arab countries, including Egypt, Jordan, and Syria. Assistance was also sought from the United Kingdom. Teachers from those nations were employed to teach the various subjects. For example, English language was taught by British and Indian expatriates. Although Oman's teachers had received local training of varying lengths to prepare them for teaching, not only was there a paucity of available teachers in Oman, but there was also an absence of suitable schools. Historically, some parents had sent their children to other Gulf States, to other Arab countries, to the United Kingdom, and to the United States – especially when they wished to

provide them with an advanced education. When these persons returned to Oman they assumed responsibility for operation of the ministries of the country. In doing so, they began to develop a sense of ownership for the well being of the country. This came from living in the society and taking appropriate action, as their responsibilities required, including having concern for development of the educational system, notably as a means of moving the society forward.

On 19 December, 1974, the Ministry of Education issued a decree forming a twelve-member committee, chaired by the Head of the Curriculum Development Division in the Directorate of Research and Development. The committee included nine members from the technical staff in the Directorate as well as two members from the Department of Adult Education. Both organisations had been formed in 1970 as part of the new emphasis on Omani education.

The task of this committee was to draft a statement of the educational philosophy and general goals of education in Oman. The statement also defined educational objectives for the primary, preparatory and secondary levels, with general principles to be followed in the design of curricula for the schools and the choice, organisation and time allocation for the subject matter at each grade level. In preparing a draft statement, the committee relied on speeches of His Majesty Sultan Qaboos and on a working paper prepared by Farhan and Associates, Jordanian consultants to the Ministry of Education, together with papers prepared by members of the Directorate of Research and Development. Details of the draft were prepared with the assistance of a team of seven educational specialists from Jordan (hereafter identified as Farhan, *et al*). When the draft was completed, it was distributed to all ministries in the country for comments. After all responses had been incorporated in the final draft, it was presented to the Oman Committee on Education, which approved the document on 12 May, 1975. This document became the Ministry's 1978 *The Philosophy of Education in Oman.*

Once the statement of educational philosophy and general goals had been approved, curriculum designers (both Omani and expatriates) proceeded to translate these objectives into practice using a western model based on Tyler's work. During 1976-77, draft outlines of text materials, teachers' manuals and other educational materials were prepared. In 1977-78, these proposals had been sent to specialised subject area committees, who designed twelve curricula and wrote numerous student textbooks and teachers' guides. These committees took into consideration Omani values, norms, and philosophies of education, as well as comparative curricula from neighbouring Arab countries and world-wide trends in curriculum development. In 1978-79, a conference was held to review all the materials, following which they were sent to the Omani Committee on Curriculum Development, which

supervised any modifications before the materials were prepared in their final printed form. At the beginning of the 1979-80 academic year, a conference was held for the personnel who would direct the implementation of the new curriculum and train the supervisors, headmasters and subject-matter teachers all of who would be responsible for putting the new curriculum into practice. Procedures for implementing the new curriculum were prepared by Farhan *et al.* By the end of 1980, the new curriculum and supporting materials were in use throughout the country.

In 1985 Farhan *et al* provided curriculum design and implementation based on Tyler's model which was followed for eight years. Then the system was evaluated in a series of studies by Razik (1987, 1988, 1989).

From Farhan's document it can be seen that the Omani philosophy of education, which is based on the country's social and economic needs, is:

1. Humanistic in its pursuit of Oman's welfare among nations;
2. Ambitious in seeking a better life for the people of Oman within the framework of their beliefs and aspirations;
3. Comprehensive in developing the manpower needed for the labour market; and
4. Cognisant of universal principles of education throughout the world as well as the special needs of Omani society.

The second stage of development was accomplished in the first Five-Year Plan, (Development Council 1976) from 1976-1980. These initial steps toward improvement changed dramatically. Under this plan Sultan Qaboos directed the initiation of an overall reform for Oman's educational programme specifically designed for the needs and priorities of Oman. This reform was reviewed and agreed to by all of the leaders of the Omani government. In addition to making education available to children in the most remote regions of the country, this reform gave priority to improving the quality of education. Attention was given to co-ordinating education with economic and social planning, training the skilled manpower required for national development, and preparing teachers for primary education. In 1976-77, the first Teacher Training Institute for primary schools was established. Students were trained at the Institutes under a project sponsored by the International Bank for the Reconstruction and Development (IBRD)[8] and UNESCO. Staff expertise for the training was provided by expatriates from neighbouring Arab countries. These institutes accepted

[8] The World Bank through (IBRD) supported Education by providing funds to build the first Teacher Training Institute in Muscat.

graduates from various preparatory schools and provided secondary level education to those who would go on to teaching positions.

Multinational co-operation to assist in the early efforts to build a proper educational infrastructure for Oman was both timely and much needed. An agreement of mutual assistance was signed early in 1974 between the Government of Oman, the World Bank and the United Nations Educational, Scientific and Cultural Organisation (UNESCO). A competent team of small, but efficient and dedicated international experts was selected. The basic terms of reference of the "UNESCO, World Bank project in Oman" restricted certain sectors of the system especially during the early phases, to the technical co-operation of the concerned Ministries' Departments or sections and the international personnel, each in their areas of specialisation. These included assistance in adult and literacy education, Arabic for non-Arabic speaking Omanis, the budding but fast-growing beginnings of teacher training.

For several years, restricted to the elementary teacher training, two other activities were of special importance. They were educational planning and the beginning of the first "proper" industrial school. Experiments in agricultural education as well as efforts to establish an experimental model middle school for girls were not so successful. The social and economic need for these efforts proved them to be premature. The second and successive phases of the UNESCO contribution embraced work on the Omanisation of the curriculum, and on this the project was represented by its project manager who was also the curriculum expert of the technical team.

UNESCO bilateral assistance also included the training of a selected group of young Omanis in the Ministry. Many of those had gained good enough experience of various specialisations to offer much needed assistance at some of the critical phases of the educational development in Oman[9].

The second stage of development was extended in the Second Five Year Plan, from 1981 to 1985, and in the subsequent Third, Fourth, and Fifth Five Year Plans. During the Second Five-Year Plan intermediate colleges for teacher training were established. Funding for development of the colleges was provided by the World Bank. These colleges provided training in curriculum structure and content and development in teaching methods through integrated in-service programmes for teachers. During this stage, an "education abroad" programme was established, secondary school options were diversified, efforts were made to

---

[9] A model for curriculum Evaluation, the experience of the Sultanate of Oman (Dr Mohammed K. Osman. Unpublished document).

balance educational opportunities throughout the country, and programmes and facilities were enhanced.

Some parents who could still afford to sent their children abroad for education. The Ministry of Education established scholarships for study, mainly in the Arab countries, the United Kingdom and the United States. Students taking part in this programme were frequently involved in a wide range of academic specialities, including some in education.

Thus, by the end of the Second Five-Year Plan, schools numbered 606, with a total enrolment of 221,694 students. Of these, 79.1% were in the primary level, 15.2% were in the preparatory level, and 5.6% were in the secondary level. Females accounted for 42 percent of the total number of students. Teachers numbered 10,131. Total school enrolment subsequent to 1988 and the percentage of total enrolled persons in secondary school rose from 323,508 in 1989 with 5.95% in secondary school to 526,810 in 1997-8 with 17.24% in secondary school (Statistical Yearbook, 1998). Over a decade, enrolment in the schools had nearly doubled, and enrolment in the secondary schools had nearly tripled.

In 1988, after the new curriculum had been in use for eight years, a decision was taken to subject it to a comprehensive evaluation. A team headed by UNESCO consultant, Taher Razik, was engaged to conduct the project.[10] The evaluation used an integrative model based on descriptive-survey and interview techniques similar to those noted in Chapter Two as being part of the conception empiricist tradition.

In this review, all aspects of the curriculum were considered, including the fundamental philosophy, the general and specific goals of the courses on a course by course basis, the evaluation procedures, and the procedures used to implement the curriculum. The complete review was published in several volumes – in 1987 for elementary, 1988 for preparatory and 1989 for secondary schools. The main purpose of this evaluation was to determine the extent to which the objectives of the programme were being realised (Razik, 1987, 1988, 1989).

Razik concluded that the curriculum formulated at this time was appropriate for levels and stages of education and was being implemented in accordance with best practice. However, by the early 1990s it was becoming apparent that the system that had been developed over the previous quarter of a century needed rethinking. Changes in the labour market resulting from world-wide technological advancement, the need for national self-

---

[10] Razik is a graduate professor of education at the State University of New York at Buffalo who has served as an UNESCO consultant to Oman and other Arab nations.

sufficiency, and the need for economic diversity were among the economic and political pressures moving Oman toward educational reform. Therefore, in early 1995 the Ministry of Education commissioned a team of Canadian[11] education experts to study the General Education system (Oman's public elementary and secondary schools), and to recommend necessary changes. This study resulted in the Ministry of Education's 1996 report.

The Ministry of Education's reform efforts were co-ordinated with a broader set of reforms expressed in the 20:20 Vision, which was a proposal for upgrading Oman's economy and preparing the country for viable participation in the 21st century. Comprehensive in its approach, 20:20 Vision contemplated a series of actions to be taken on economic, social and educational fronts.

The general aims of Omani education were to (a) build the integrated character of Omani individuals who are capable of participating in current life and in the future; (b) achieve a comprehensive development for Omani society; (c) assure the ability to cope with contemporary changes and contribute to those changes, and (d) assure that the Omani individual is adopting a scientific method of thinking in life and is knowledgeable of current sciences and technology (Ministry of Education, 1995).

This was in direct contrast to the old system of general education. The 6-3-3 system, which has been the dominant Omani public school model, is presently being phased out. However, it will take approximately seven to ten years to complete the changeover. Therefore it will be useful to describe the system as it existed before the 10-2 reform movement began, and as it will continue to exist in some quarters for several years to come Subsequent to this presentation the chapter will delineate an overview of the framework within which change has occurred, this being the 20:20 vision.

1) Primary Education

Children between the ages of six and eight could enter the first year of primary school, in which they remained for six years. Initially, students completing six years of primary education took a national examination and, if successful, were awarded the General Primary Certificate before proceeding to the preparatory level. However, in 1976 the Ministry of Education eliminated this certification procedure, and all students who successfully completed the sixth grade became automatically eligible to enter the preparatory level.

---

[11] Canadian consultant team, invited by Ministry of Education in 1996

Although primary education was not compulsory, as Oman's educational infrastructure evolved, the percentage as well as the average annual numbers of new and registered Omani children enrolled in primary education increased dramatically.

In 1974-75 there were only 48,576 registered students. By 1985-86, there were 326 primary schools (104 for boys, 118 for girls, and 104 for both sexes), with a total enrolment of 175,452 students. In Oman's first census, held in December 1993, there was a population of 2,255,000, of which 1,695,000 were Omani and 560,000 were expatriates. Of a total of 514,315 students enrolled in the schools, there were 300,270 that were enrolled in the primary schools: 155,486 boys and 144,784 girls (1997-8 Statistical Yearbook, Ministry of Education, 1998).

Although the primary level continued to constitute the broad base of education, embracing the majority of registered students in schools as a whole, the shape of the educational pyramid was changing. In the year 1973-74, primary level students accounted for 99.04% of the total number of students registered. In 1985-86, this dropped to 79.14%, showing the proportionally greater expansion of preparatory and secondary school enrolment. By the end of the Third Five Year Plan (1990-1991), this percentage had dropped to 72.59%; by the end of the Fourth Five Year Plan (1995-96), this percentage had again decreased, to 60.78%.

2) Preparatory Education

Under the 6-3-3 model, upon completion of the primary level, students may progress to the three-year preparatory level. At this level, the curriculum stresses general education; however, it includes limited practical studies, such as crafts and agriculture for boys and home economics for girls. Internal examinations are given each year, and promotion to the next grade requires a pass mark in each subject. At the end of the preparatory cycle, students sit for a national examination. If successful, they receive a General Preparatory Certificate, which is the requirement for enrolling at the secondary level. Students who fail the examination may not re-enroll as regular students. Of the students who began preparatory education in 1977-78, 48.9% successfully completed the programme in three years, and another 4.3% successfully completed the programme after an additional year, the maximum time allowed for study at this level.

Prior to 1970, families did not encourage girls to go to school. After 1970, that practice changed. More girls enrolled in schools in Oman than boys. Since the preparatory level was instituted in 1973, there has been a phenomenal rise in the number of preparatory school students. From the first two schools, containing a total of 146 male and female students, by 1975-76, the number of schools had risen to 23 preparatory schools (21 for boys

and 2 for girls), with a combined total of 1,100 students. By 1985-86 there were 213 preparatory schools (94 for boys, 49 for girls and 70 for both sexes), containing a combined total of 33,600 students, 230 times the 1973 enrolment in the preparatory level. By 1990-91, there were 72,009 students enrolled in the preparatory level (Statistical Yearbook, 1992) (Ministry of Education 1992).

3) Secondary Education

Students passing the General Preparatory School Certificate examinations are admitted to the three-year secondary level. Students are distributed among the various streams, including specialised and university preparatory, according to their grades in preparatory school and the availability of places at the secondary level.

Secondary education fills a dual role; to provide the knowledge and study skills necessary for students who will progress to higher education and to provide the competencies necessary for students who will join the work force, either immediately or after a period of specialised training. Programmes for both streams of students share four general goals as expressed in the Ministry of Education's 1978 Philosophy of Education in the Sultanate of Oman: (a) physical development, including psychomotor and manipulative skills; personal and public hygiene, health and safety; and awareness of patience, endurance, courage and fairness; (b) intellectual development, including perceptual acuity, reasoning, formulation of experiments, assessment of outcomes, discrimination, and application of verbal and mathematical skills to problem solving, creativity, self-motivation, and the scientific method of thinking; (c) spiritual development, including application of Islamic principles to daily life, self-confidence, loyalty to country and the Sultan, appreciation of beauty, and appreciation of the value of individual and collective efforts; and (d) social development, including knowledge of the heritage, progress, and future aspirations of Oman; preservation of the environment, respect for the dignity of labour, unification of Oman with the Arab world; understanding the necessity of communication between Islamic civilisations and other civilisations; and development of interactions with other people based on mutual respect, honesty, courage, honour, sincerity and loyalty.

In 1973, there was one class with a total of 25 students at the secondary level. By 1985-86, enrolment at the secondary level had increased to 12,330 students. However this figure still comprised only 5.6% of the 221,694 students in the Omani education system in that year. By 1990-91, there were 25,237 students enrolled in secondary education, or 7.2% of the total (Statistical Yearbook, 1992) (Ministry of Education 1992).

According to the study by Razik (1988), 81.7% of the 1980-81 graduates of preparatory school went on to the secondary level; by 1981-82, this figure had increased to 93.2%. This study also showed that, for students entering the secondary level in 1977-78, 63.9% completed the programme in three years. 3.5% of students completed the secondary programme after another year, the maximum allowed for study at this level.

With reference to Table 3.1, it can be seen that according to the Statistical Yearbook, 1994 (Ministry of Education 1994) enrolments had increased to 117,277 persons in preparatory school and 60,079 persons in secondary school. By 1999 there were 143,000 pupils in preparatory school and 97,000 students in secondary school.

Education Statistics, Sultanate of Oman: 1970 - 1999

Table 3.1

Item	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985
General Education (Govt.)															
Schools	980	968	958	967	953	926	899	857	823	779	741	703	678	649	588
Students (000)	542	528	514	503	489	470	449	420	387	356	323	295	269	245	219
Classes	16,507	16,110	15,721	15,403	15,024	14,340	13,619	12,662	11,679	10,665	9,835	9,044	8,421	7,943	7,069
Teachers	24,881	24,093	23,245	22,693	22,292	20,946	19,546	18,325	16,475	15,121	13,695	12,860	11,990	17,153	9,793
Students/Teacher	22	22	22	22	22	22	23	23	24	24	24	23	22	14	22
Students/Classes	33	33	33	33	33	33	33	33	33	33	33	33	32	31	31
Basic Education															
Schools	*	17	–	–	–	–	–	–	–	–	–	–	–	–	–
Students	21,923	11,400	–	–	–	–	–	–	–	–	–	–	–	–	–
Classes	774	397	–	–	–	–	–	–	–	–	–	–	–	–	–
Teachers	1,356	637	–	–	–	–	–	–	–	–	–	–	–	–	–
Primary															
Schools	*	277	318	338	347	356	359	361	382	386	388	370	367	354	326
Students (000)	280	290	300	301	297	294	290	284	272	258	243	229	212	195	175
Classes	8,232	8,523	8,820	8,801	8,755	8,627	8,467	8,205	7,865	7,409	7,051	6,651	6,312	6,023	5,351
Teachers	10,233	10,810	11,189	11,173	11,287	10,995	10,647	10,414	9,816	9,248	8,696	8,308	8,080	7,517	6,539
Preparatory															
Schools	*	497	472	470	458	435	422	393	358	317	283	267	249	238	213
Students (000)	143	139	133	125	122	116	108	96	84	72	61	51	43	38	33
Classes	4,414	4,3433	4,214	4,036	3,897	3,679	3,453	3,104	2,768	2,392	2,089	1,815	1,587	1,450	1,295
Teachers	7,600	7,218	7,082	6,767	6,566	6,191	5,774	5,293	4,686	4,224	3,648	3,402	2,879	2,682	2,449
Secondary															
Schools	*	177	168	159	148	135	118	103	83	76	70	66	62	57	49
Students (000)	97	88	81	77	69	60	51	40	31	26	19	15	13	12	11
Classes	3,087	2,847	2,687	2,566	2,372	2,034	1,699	1,353	1,046	864	695	578	522	470	423
Teachers	5,692	5,428	4,974	4,753	4,439	3,760	3,125	2,618	1,973	1,649	1,351	1,150	1,031	954	805
Expenditure *(MnRo)*															
Current	196.4	186.2	179.2	168.1	163.8	154.2	151.8	136.2	125.8	124.3	107.8	104.6	100.1	97.1	83.1
Investment	*11.2*	*15.1*	*11.3*	*11.6*	*20.1*	*18.8*	*20.3*	*15.6*	*12.8*	*11.2*	*6.5*	*11.9*	*16.5*	*18.1*	*16.2*
% Share from Total Govt															
Expenditure	9.2	9.1	8.3	8.0	8.1	7.9	7.7	6.7	7.5	7.2	6.9	7.4	7.2	6.1	5.1

Table 3.1 contd.

Item	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970
General Education (Govt.)															
Schools	541	499	455	408	373	363	352	310	261	207	176	111	68	42	16
Students (000)	193	164	141	121	107	95	86	76	65	56	49	36	24	15	7
Classes	6,040	5,330	4,664	4,137	3,618	3,152	2,825	2,416	1,992	1,617	1,384	899	566	345	151
Teachers	8,064	7,509	6,575	5,864	5,150	4,055	3,865	3,552	2,878	2,230	2,115	1,195	735	445	196
Students/Teacher	24	22	21	21	21	23	22	21	23	25	23	30	33	34	35
Students/Classes	32	31	30	29	30	30	30	31	33	34	36	40	43	44	46
Basic Education															
Schools	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Students	21,923	11,400	–	–	–	–	–	–	–	–	–	–	–	–	–
Classes	774	397	–	–	–	–	–	–	–	–	–	–	–	–	–
Teachers	1,356	637	–	–	–	–	–	–	–	–	–	–	–	–	–
Primary															
Schools	308	300	204	177	175	237	257	237	213	181	163	105	65	42	16
Students (000)	155	135	116	102	92	84	78	71	63	54	49	35	24	15	7
Classes	4,575	4,099	3,655	3,287	2,964	2,677	2,480	2,185	1,871	1,557	1,350	884	559	345	151
Teachers	5,369	5,013	4,582	4,107	3,756	3,107	3,229	2,923	2,523	2,042	1,999	1,160	726	445	196
Preparatory															
Schools	195	170	219	210	183	114	86	67	45	23	11	5	3	–	–
Students (000)	28	23	20	17	14	10	7	5	2	1	1	0	0	–	–
Classes	1,132	991	850	750	590	434	313	208	106	50	29	14	7	–	–
Teachers	2,054	2,086	1,694	1,545	1,2254	847	565	549	310	148	104	30	9	–	–
Secondary															
Schools	38	29	32	21	15	12	9	6	3	3	2	1	–	–	–
Students (000)	9	6	4	2	2	1	1	1	0	0	0	0	–	–	–
Classes	333	240	159	100	64	41	32	23	15	10	5	1	–	–	–
Teachers	641	410	299	212	139	101	71	80	45	40	12	5	–	–	–
Expenditure *(MnRo)*															
Current	72.7	66.0	55.1	44.6	31.8	21.9	18.7	14.8	10.6	7.2	4.3	1.8	1.0	0.5	–
Investment	23.9	21.7	21.0	9.7	6.1	5.6	7.2	5.2	2.1	2.2	1.3	0.8	1.6	0.8	–
% Share from Total Govt															
Expenditure	5.4	5.7	5.3	4.4	4.0	4.1	5.1	3.6	2.2	1.8	1.6	2.3	3.6	2.8	–

Note: Single Years reflect the academic Year is 1970 mean: 1970/1971 and so on.
In 1999/2000 Schools were distributed as follows: (42) basic education, (219) Primary, (21) Preparatory, (56) Secondary, (454) Primary and Preparatory, (52) Preparatory and Secondary, (136) Primary and Preparatory and Secondary.

4) Private Schooling

Private schools have been established to serve the children of expatriates employed in Oman. Parents seek education for their children in these private schools. These include schools sponsored by the British, United States, Indian, Pakistani and Egyptian interests. Recently the Oman private sector has begun establishing private schools due to the crowded

classes in government classes, with over 40 students per room, and particularly in response to the demand for instruction in the English language. By contrast, instruction in Arabic is important to the children of expatriates because Arabic is the language of the country, and these persons need the language in order to conduct daily business or work effectively within the society. In addition, under the reform curriculum, instruction in the English language is provided beginning in grade one as opposed to grade four as was previously the case. As the private school programmes have increased in size they have come under the supervision of the Ministry of Education. The programmes operate generally at the primary level, with a few at the preparatory and secondary levels.

During the academic year 1997-98, 19,079 students attended a total of 106 private schools in the Sultanate. This figure constituted 3.25% of all Omani students enrolled during that academic year. The Ministry of Education encourages the establishment of private schools in order to provide students with a range of educational options. Government inspectors ensure that the Omani curriculum as well as the standards in the private schools are at least at the same level as standards in the government schools. In 1994-95 there were 83 private schools, with 14, 741 students including pre-elementary and 1,019 teachers (Statistical Yearbook, 1996) (Ministry of Education 1996).

5) 20:20 Vision

Along with these directives towards efficacious implementation of educational reforms, there comes a political and educational drive for certain styles of administration and leadership. These can be seen in the 20:20 Vision. The 20:20 vision is a comprehensive 25-year plan (1995-2020) for the economic and social development of Oman. It was initiated by the Ministry of Planning and Development at the direction of the Sultan. A working group comprising representatives of each Omani ministry as well as a team of international experts in planning and development, helped the project to the implementation stage. The discussion of the 20:20 Plan, which follows, refers to the efforts of this working group[12]. Their work and recommendations are documented in the Ministry of Development and Planning's 20:20 Vision.

This plan includes provision for such factors as diversification of sources of income, increased Omanisation, shift from the public to the private sector, balancing of Government budgets, participation in the emerging global economy, reprioritising of employment

---

[12] Made up of representatives from the Ministry of Planning and the Ministries of Economic Development, Social Affairs and Education.

categories, encouragement of entrepreneurship, enhancement of medical services, encouragement of lifelong learning, and the redistribution of national wealth in order to ensure that all Omani citizens will obtain the benefits of the emerging economic order.

The focal point of the 20:20 plan is the optimisation of human resources. A plan for the revision of the education system has been designed to fit within the context of the optimisation of human resources. This plan has been designed to enable Omanis to achieve economic self-sufficiency through a diversified economy, to keep pace with technological change and to participate in the global economy. These goals will require a high degree of adaptability and a strong background in science and mathematics that Omanis will require to contend with the very different future that they face.

The revision of the education system that was approved in 1995 was scheduled to be phased in with the fifth five-year plan beginning in 1996. Projected total enrolment is expected to increase from 469,848 students in 1995 to 717,214 students by 2001, a growth of 247,366 students. It is estimated that most of this growth will be at the secondary level. The revised plan encompasses the realisation of the national goals as articulated in the 20:20 Vision. This plan includes reforming the structure of the administration of the Ministries of Education and Higher Education; restructuring the school day and school year; promoting the option of private education; enhancing the qualification of teachers; strengthening the programs in science, mathematics, and English language; introducing a "life skills program"; developing cost-effective laboratory facilities for pupils of all ages; transforming school libraries into learning resource centres; and streamlining and upgrading programme as well as pupil assessment techniques.

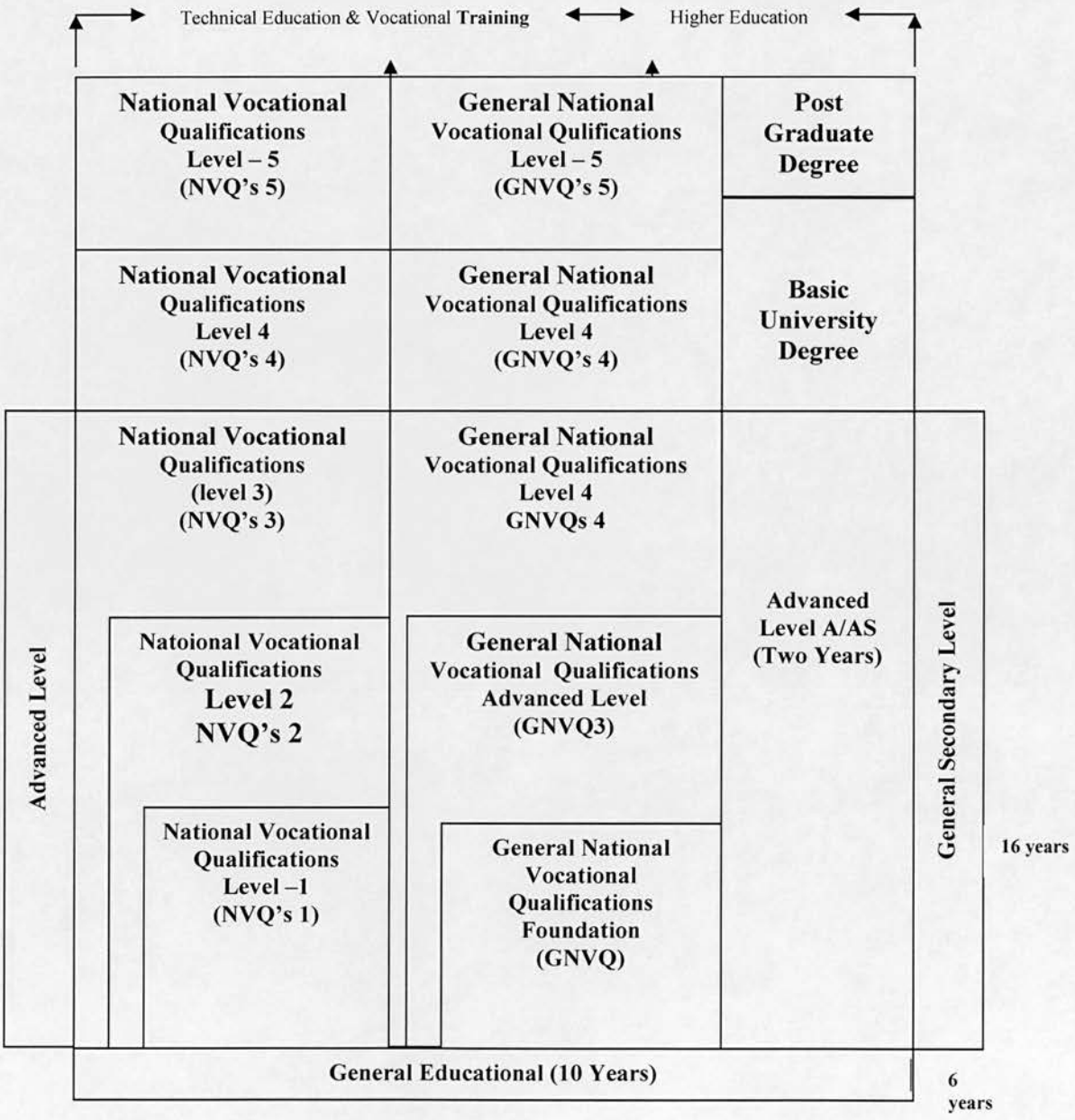
The education system is envisaged as a sequence of interlocking blocks, the successful implementation of any one of which depends on the successful implementation of all others. The nerve centres for the implementation of the entire programme must consist of the Ministries of Education and Higher Education. Proposed reforms for the administration of these bodies have been designed to enhance communication between units, promote understanding of the proposed reforms, and achieve the implementation of these reforms. In essence, reforms within the Ministries consist of the formation of various teams or work groups designed to implement various aspects of phases of the new curriculum or to train teachers in its rationale.

According to the 1998 World Education Report published by UNESCO (1998), in the number of teaching hours per day (4) and the number of teaching days per year (160) prior to the projected 20:20 Educational Reform, Oman ranked among the lowest nations in the world. By comparison, Singapore had 200, Japan 240, the United States 180, and Canada 197-205. There may have been various reasons for this situation, including from the number

of hot days during the summer and the limited number of school days, thus requiring "double-shifting". However, these problems have been addressed in the reform proposals in various ways, introducing air conditioning in the classrooms and building enough additional schools so that double shifting will not be required. Once these problems have been solved, the number of teaching hours per day and the number of teaching days per year can be increased to correspond to international norms. The school year can be increased from 160 days per year to 180 days per year, and the number of hours per day can be increased from four hours to five hours. These changes will allow for a 40 period week of 40 minutes per period (10 more than there are now). These changes will increase instructional time in Basic Education from 6,506 hours to 9,600 hours, thus providing time for the additional changes that have been envisaged.

Since increasing the number of hours per day and the number of days per week will increase the total number of hours spent on basic education by over one third, it will be possible to reduce the number of years spent on basic education from 12 to 10. Formerly, the school curriculum consisted of six years of primary education, followed by three years of preparatory education, followed by three years of secondary education. Under the proposed new curriculum, basic education is to consist of four years of primary followed by six years of intermediate education. The average student is expected to complete the basic education programme by age 16. At this point there will be several options to pursue. Depending on the needs of the society, a certain percentage of students will enter into a two-year university preparation programme. Students may also enter various sorts of vocational training programmes. Further they may enter directly into the work force. These possibilities are presented in a diagrammatic form in figure 3.1. From diagram it can be seen that the relationship of technical education, vocational training, and higher education is that proposed in the 20:20 plan. In this figure, NVQ stands for National Vocational Qualification and GNVQ stands for General National Vocational Qualifications. Both are competency benchmarks established under the 20:20 plan. The plan itself emerged from discussions between the Ministry of Education and United Kingdom consultants, supported by the British Council. In line with many similar developments elsewhere in the world, there have been some problems with the implementation of these "pathways of provision". Adaptations have resulted in the abandonment of the GNVQ pathway and the introduction of an "Omani NQ" the ONQ. This is seen as preferable neither to a qualification that did not articulate particularly well with Oman's further and higher education system nor with employers in the labour market.

Figure 3.1
Educational Systems Approved in the Vision for Oman Economy – Oman 2020



1) These two levels have not yet implemented

In their educational aspects, 20:20 and the related national plans have involved a comprehensive review of the Omani educational system and practices. This review has been followed by a series of actions intended to upgrade the system. The Ministry of Education's 1995 plan, Reform and Development of General Education, outlined steps including increasing the number of Omanis teaching in the system; reorganising the system to its current 10-2 model; improving the training of prospective Omani teachers; revising the curriculum to focus on a standards-based curriculum emphasising math, science, problem solving, higher-level thinking skills, independent learning and computer literacy; developing new leadership skills in administrative staff; and working to revise the culture of the schools from a top-down management model to a shared-power team-based management model.

Implementation of the current Omani educational reforms has necessitated taking into account a wide range of issues, needs, and influences. Using Easton's model, Al-Hammami (1999) has expressed these as inputs from the main political system, from the economic and labour market systems, from the social and cultural systems, and from the international and national education systems. The wide range of these inputs and their significant impact on the reform effort are mirrored in Vision 20:20, in the Reform and Development of General Education, and in the various Five Year plans, as well as the various reports and discussions that have resulted since the beginning of the implementation of this cycle of reforms.

Implementation of these changes in the Omani education system has been regularly monitored both by direct observation and through use of a series of international consultants[13].

The Ministry of Education's Fifth Five Year Plan (1996) outlined two major educational stages for the revised Omani system: a 10-year basic education stage, and a two-year secondary education stage. Policies outlined in the Plan related to this two-stage system included the following:

1. increasing emphasis on mathematics, science, computing and economics by increasing the number of periods allocated for these subjects and reducing those allocated for the arts;
2. Teaching English at and from the first stage of basic education;
3. Cancelling evening classes so as to increase the length of day class periods;
4. Providing the appropriate facilities, equipment, staff, and materials to properly equip

---

[13] Reports filed as a result of those monitoring activities have included the Ministry of Education's Consultancy Study on Management and Organisational Structure (1996); Kimber, Gordon and Gibbons, Report on a Visit to the Sultanate of Oman (1996); Al-Nhar and Billeh, Monitoring of Learning Achievement Project: Assessment of Learning Achievement of Grade 4 Students in Oman (1997); Mathews *et al.* Reviewing the Work of the Schools (1998); and Al-Belushi, Al-Adawi and Al-Kitani, Education Reform in the Sultanate of Oman (1999).

students to compete in the labour market or in higher levels of education;

5. Modernising the curriculum to keep pace with scientific and technological progress;

6. Upgrading educational practices to match modern educational techniques;

7. Improving the employment conditions of teachers in order to attract high calibre personnel;

8. Determining the appropriate form of secondary education that will ensure graduation of student who are prepared to meet the demands of the labour market;

9. Improving the in-service training of teachers; and

10. Using specialised international organisations to conduct periodic evaluation of educational standards in Oman in comparison to the educational standards to other countries with high standards.

In working to put these broad statements into practice, the Ministry of Education established a series of procedures. First, studies were conducted to evaluate the then-current educational system. Second, groups of Ministry specialists visited a number of countries to observe applications of new trends in education. Then advice was requested from a number of universities about designing a new system of education. Finally, education experts from several countries were invited to visit Oman and assist in developing the new system.

Additionally, in December 1996, the Ministry of Education hosted an international conference in Oman entitled "Improving Formal Basic Education by Institutional and Content Reform" with the assistance of the Netherlands based Lutfia Rabbani Foundation. According to the conference participants, improving the quality of basic education was an essential investment in the development of each country and should be the starting point of educational innovation. The quality of basic education is a culture-bound concept. Therefore, quality criteria should be stated in relation to the local culture but with relevance to global standards. It was noted at the 1996 conference that standardised criteria should be developed for measurement of the outcomes of the learning process. Appropriate assessment tools should be developed to accomplish that measurement. Objectives, standards, goals and assessment processes should be linked. There should be periodic evaluation and updating of curricula. Reform of curricula, textbooks and methodology should be based on the results of research, which must reach decision-makers. Information technology should be given attention as part of educational reform. Finally, teacher training should be emphasised to create a better fit between teaching style and student needs.

In the light of these reports and the imperative for reforms, structural and curriculum changes have become inevitable. Indeed as Chapter One noted, globalisation does not

necessarily mean uniformity in education systems but rather encourages similarity in curriculum design.

It is an interesting and important feature of Oman's educational system that there are currently five Ministries involved in education planning and provision. The Ministry of Education is responsible for primary, preparatory and secondary education; adult education; as well as the campaigns for the eradication of illiteracy. Through a network of regional directors, the Ministry supervises the administration of educational programs and policies. A further system of supervisors has been initiated to monitor the standards of achievement and curriculum implementation in the schools within particular regions.

The Ministry of Social Affairs and Labour is charged with responsibility for developing the nation's manpower skills, supervises vocational and special training programmes, in which priority is given to such fields as construction, electricity, mechanical engineering, and office management. Other ministries supervise education related to their missions. Among these are the Ministry of Health, the Ministry of Defence, and the Ministry of Higher Education. These are in addition to Sultan Qaboos University.

In fact, education innovations in the Omani system have started at the top, with a reorganisation of the Ministry of Education in 1997. The reorganisation involved the creation of five directorates general in the Ministry with matching departments in the nine regional educational offices. The directorates general include Planning and Educational Information, Curriculum and Training, Financial Affairs, Administrative Affairs and Public Affairs. For this thesis, the most important directorate is curriculum and training,

The Ministry of Education expects that implementing the basic education system will reduce the chances of students leaving the school system and thereby minimise the illiteracy level in the country (Ministry of Education 1995).

A set of committees was established to manage the reform process. They included a committee to revise the statement of general education aims. This effort took into account Islamic beliefs and the Omani environment, culture and plans to advance the country. Four more committees were developed to implement curriculum supporting these aims. They included the Main Committee, headed by the Minister of Education, which oversees the other three committees. The Curriculum, Examination, and Training Committee is responsible for improvements in curriculum, assessment, and the training of teachers. The Planning and Buildings Committee is responsible for evaluating the need for new construction and plans and oversees that construction. The Follow-up of Requirements of Basic Education Committee is responsible for following up on construction and then equipping and staffing the schools.

Curriculum Reform

Abolishing evening schools was another reform of the Omani educational system. Under the existing system many school buildings housed both a day and an evening school. This limited the length of the day school operation, affected the nature of the curriculum, and forced emphasis on memorised lessons rather than experimental learning because of the need to cover content rapidly. In addition, access to school resources such as the library, the science laboratories, and sports was also limited. Once the schools moved to a single shift the school day was extended. This allowed more effective teaching and improved access to school resources for the students.

Curriculum improvements focused on two areas: curriculum content and teaching methods. Curriculum content was improved in four ways: reducing theoretical content, relating the material to students' lives, connecting the curriculum to the students' direct environment, and aligning the content of the curriculum to the students' level at each educational stage. Improved teaching methods were encouraged by advising and training teachers to concentrate on experiential learning for students as opposed to rote memorisation techniques.

The expectation of the Ministry of Education is that the new curriculum will foster critical thinking skills and problem solving on the part of the students. Drawing upon students' backgrounds and experiences should help them to become more active participants in the learning process. They then should be more successful in linking their school experiences to their life experiences, and become more active, thinking citizens. A learner-centred model of education, which is structured to match the various stages of development of the students, encourages active learning as well.

With the additional instructional time made available by restructuring the school day, additional emphasis is being put upon development of language skills (both Arabic and English), social studies including life skills, science, mathematics, and computer literacy. Basic Education schools are being equipped with science laboratories, computer laboratories, and learning resource centres. These centres will enable students to access information in a variety of ways, including print, videotape, audio-tape and computer.

Assessing learning

As curriculum and instructional procedures move away from rote learning and passive learners to problem solving, critical thinking, and active learners involved in a group learning process, new methods of assessing learning must be developed. Assessment methods must reach out to evaluation of higher-level thinking skills and must accommodate students'

developmental levels. In addition, under the curriculum reforms outlined for Oman, emphasis must be placed on practical applications as well as theoretical elements of the content.

To accomplish this, the Ministry of Education has made three fundamental decisions: to downgrade formal tests and examinations, to remove promotion examinations, and to implement authentic assessment using performance assessment and portfolios.

Working with the Scottish Qualifications Authority, the Ministry of Education will gradually move from attainment tests to diagnostic tests, training teachers in the new techniques, create specifications for examination papers, establish a data bank for standardised questions, train Omani teachers in question writing, widen the variety of questions used in assessment, and apply an automatic correction system to the management of objective questions (Ministry of Education, 1999).

It is expected that this approach will require continuous gathering and evaluation of information on student performance. The performance will be matched against stated learning objectives. Through this approach not only can student performance be measured, but also education staff and other interested persons can identify problem areas in curriculum, teaching methods, and students' abilities to learn. That will allow steps to be taken to resolve those problems.

This approach to student assessment will be achievement-based, with student progress measured against stated criteria rather than against the progress of others in the class. Learning objectives will be written for individual students rather than the class as a whole, and students will know in advance what is expected of them personally. A wider range of evaluation techniques will be used than in the traditional system, and formative as well as summative evaluation will be employed. Students will be given opportunities to review their progress against the stated criteria, thereby taking a more active hand in their own learning.

Between 1970-95 there had been little formal evaluation of curriculum in Omani education. Evaluation of curriculum in the formal sense had not been a part of the framework of the Islamic educational system. However formal evaluation of curriculum in the Omani public schools became a priority with the first educational reform in the 1970's, and is now an integral part of the Ministry of Education's restructuring of the educational system as evidenced by the series of Five Year Plans and Reform and Development of General Education. We have seen that the most comprehensive evaluation of curriculum nation-wide was conducted by Razik in 1980.

It is noteworthy, given the outline of the curriculum in Chapter Two, that in developing the 1975 Omani curriculum, the designers relied primarily on the Administrative (line-staff) model. To a certain extent, Tyler's model (Tyler, 1949, 1982) contributed to developing the general objectives: Philosophy of Omani Educational System; Psychology of

Learning; Selection, Organisation and Direction of Learning Experiences. However, neither formative nor summative evaluation procedures were used in the curriculum project. Such evaluation as occurred was primarily informational or anecdotal, primarily in the textbook follow-up conducted by the Curriculum Department of the Ministry of Education. Each year the Curriculum Department collected teachers' and supervisors' opinions relating to the presence of errors, difficult topics, inaccurate figures, and other problematic items so that revisions and corrections could be made prior to printing the textbooks for the following school year.

It has been noted that the new system of basic education, with 10:2 years of schooling was adopted because of the need for indigenous manpower. During the consultation period it became apparent that a trained labour force would be needed to meet the present and the future needs of the Sultanate. However, at present there are not enough trained Omani available to meet that need. The expectation is that the reorganised 10-2 system (subdivided further into 1-4, 5-10, 11-12) will increase the number of Omani prepared to fill middle level skilled labour positions in the work force, replacing the approximately 600,000 expatriates[14] who currently fill these positions. The relevance of a standards-based education curriculum for labour force requirements must not be underestimated. The standards-based, or outcomes-based, curriculum focuses upon "exit outcomes" which are broad performance capabilities rather than specific curriculum skills. This gives all students and staffs an ultimate target towards which they can focus and orient their teaching and learning experiences (Spady, 1995).

Regardless of the expected benefits of the new system, there is debate in the literature over whether or not a curriculum change can by itself change attitudes towards work on the part of learners (King and Martin, 2001). However, the current Omani educational reform goes well beyond a simple curriculum change, as can be seen elsewhere in this chapter. It does however reflect a continuing concern held by Omani educationalists and policy-makers for attention to a specific Omani philosophy and sociology of education.

Over the past 25 years, the Ministry of Education has focused on the expansion of the educational system and the provision of education for all. Now, as the nation prepares for the new challenges of the future, the Ministry is initiating a programme of education reform to improve the quality and cost effectiveness of education and to ensure that the educational

---

[14] These expatriates are skilled labour such as clerks, technicians, etc. from other countries such as the Indian subcontinent and the Philippines

system provides students with the best preparation for life and employment in the 21st century.

These reforms draw attention to the challenges facing Oman, particularly the need to diversify the economy and keep pace with technological change. They indicate how Oman now requires new educational goals to prepare Omanis for life and work in the new conditions created by the modern global economy. These will require, it is argued, a high degree of adaptability and a strong background in science and mathematics in order to apply rapidly changing technologies to Oman's needs. The proposed educational reforms are designed to achieve the knowledge and mental skills and attitudes that young Omanis will need to learn in order to adapt the very different future that most of them will face.

It can be seen from a close reading of these documents that the Ministry of Education aims to strengthen, develop and renew general education and its outcomes through the adoption of the concept of a basic education level comprising 10 years. Basic education is defined as education for all, providing students with the essential skills, knowledge and attitudes that will enable them to continue with secondary level education, enter technical education, or join vocational training.

Based on the 20:20 Plan and the Reform, this new form of basic education was implemented in the Sultanate starting in 1998-99. It was inaugurated in 17 elementary schools, expanded to an additional 25 elementary schools in 1999-2000, and will be generalised to all 1,666 in the rest of the country by 2007[15].

It is the aim of the Reform that the new school system is expected to provide the knowledge, attitudes and skills that will enable learners to deal with the demands of modern life and to be better prepared for the requirements of national development, including the need to diversify the sources of income and to Omanise the work force in the country. But, at the same time, it should preserve religious and cultural values.

Basic education, as outlined in 20:20 Vision and the Reform report, is characterised by a learner-centred curriculum. It attempts to bridge the gap between instruction and the real world, through the introduction of new school subjects, especially those that prepare the learner for new life skills including those involving modern technologies. In addition, it will provide for a new administrative structure that seeks to achieve an easy flow of information as well as the development and use of educational resources such as libraries and laboratories.

---

[15] This date, 2007, now in 2001, appears optimistic. A more realistic date may be around 2010.

The new reform will seek to produce, at the exit point, learners with educational standards equivalent to those of 10th grade students from advanced countries. These learners will also have special strengths in mathematics, science and the skills of problem solving, independent learning, and computer literacy. The advantages of the system are expected to complement education with the non-academic world, between the students' intellectual growth and the work setting, between theory and application. Advantages also include the targeting of the total child, the promotion of scientific thinking and self-learning, preparation for the changing world through globalisation and responsiveness to development demands. However, given the issues raised in Chapter Two, it will be noted that such curriculum innovation is rarely introduced and implemented without major difficulties. The difficulties of implementing an education reform programme may exist at the level of administration and leadership as well as at the level of the curriculum itself. Indeed, curriculum change may never be an easy policy to implement; in Oman, as in many Arab countries, tradition and historical considerations may exacerbate the complexity of the task.

Teacher training

It may be noted that teachers are the core factor in any education reform. They must be ready to implement the new system. The Training Department of the Ministry of Education has developed and implemented a pre-service training programme focusing on the Reform and the skills necessary to work within it. In-service programmes have also been developed and implemented. In addition 10,000, all current elementary teachers holding a two-year diploma are being required to undertake training sufficient to upgrade their qualifications to the four-year bachelor's level. These training programs are all being provided free to the system's teachers by the Ministry of Education.

The Principal and the School Development Plan

The school principal is the leader and supervisor of the process of educational reform. Without the active support and encouragement of the principal and the administrative staff, the progress of the reform movement is jeopardised.

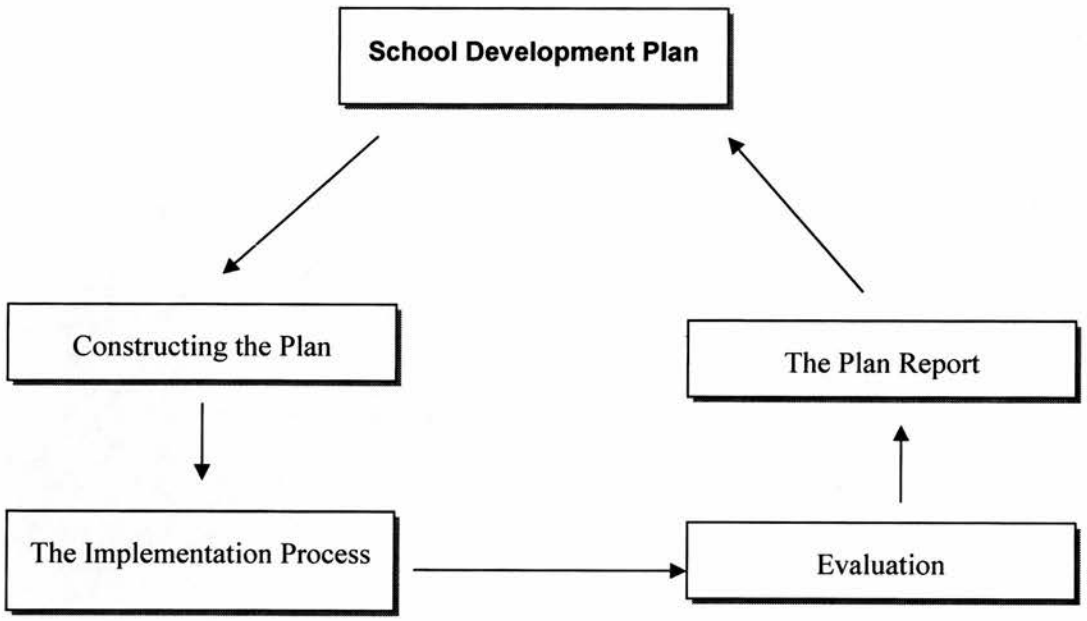
A primary task for the principal in implementing reform is development of the School Development Plan. This plan is a guide for the school's personnel in executing and evaluating the reform. Four basic questions are central to this plan:

1. What is the performance level of the school at the present time?
2. What has to be changed or modified in order to improve the performance of the school?
3. How can the school implement the changes according to the specified times?
4. How can the school measure achievement of the aims of development?

In preparing the School Development Plan, the principal needs to take into account the future vision of the school for the next three years, educational objectives and their priorities, educational values to be met through the objectives, strategies for fulfilling the objectives, plans for curriculum development and staff training, the condition and needs of the building, and the budget available.

Implementing the School Development Plan involves a continuous cycle of planning, implementation, evaluation, feedback, and re-planning, as shown by Figure 3.2.

Figure 3.2 The Administration of Change (Al-Adawi, 1999)



The School Development Plan plays a significant role in managing reform in a variety of ways. It helps in identifying the future role of the school and the priorities to be achieved. It helps in curriculum development and planning. It helps to improve the performance of administrative and teaching staff through self-evaluation and in-service training. It is expected to reduce tension and uncertainty on the job because expectations will be clearly specified. Finally, it provides administrative staff with current information that will help in writing reports concerning school performance.

Implementing the Basic Education Reform

As the Basic Education Schools were being prepared for occupancy, implementation of the Basic Education staffing and curriculum development programmes began. This process involved three steps: preparation for implementation; implementation; and evaluation of the implementation.

Preparation for implementation

Preparatory steps prior to actual implementation involved preparation and approval of a budget that summarised all human and material costs; development and approval of a time line for the first three year cycle of implementation; writing and approval of curriculum documents; ordering and delivery of equipment and supplies necessary to support the new effort; identification, training, and assignment of persons required for the new programme including teachers, senior teachers, learning resource teachers, administrators, inspectors, and support staff; and development of a training plan for staff including preparation of Training Development personnel in the Central Training Department in Muscat and in the nine Regional Training Centres.

Implementation

The new programme was phased in gradually over the first three-year cycle, to allow time for parents, administrators, teachers, pupils, and staff to adjust to the changes. This began in September 1998.

In September, 1999 25 new Basic Education schools were opened. The following year (2000-2001) approximately 100 more schools for the implementation of Basic Education for years 1-4 of the curriculum was extended to grade three. Twenty more schools were opened with the Basic Education curriculum in September 2000, and the curriculum was extended to grade four. This phased-in process will continue until the school reforms are in place in all schools at all levels in the Sultanate.

However, central to the success of the new programme is the creation of a cadre of training experts prepared to train all staff. Parents must also be prepared for the differences between the old and new programmes and to understand the principles of child-centred learning. "Core teams" of trainers have been prepared by trainers from the Central Training Department in all facets of the Basic Education reforms. Their job is to train staff and prepare parents in their own regions for implementation of the new programme, using a previously developed Basic Education Training Plan tailored to their regions and schools. An advantage of the "train the trainer" model is that it provides well-prepared local training staff who can respond more directly and quickly to needs than could the Central Training staff.

In addition, current Basic Education schools are serving as training centres for new schools. Teachers implementing the programme in 1999 and 2000 are being "twinned" with teachers from schools that are coming on line, providing opportunities for observation and learning in an applied setting for the new personnel.

In 2001 nearly all elementary and preparatory school classrooms have become staffed by the Omani faculty, with the exception of certain specialisations, notably mathematics classes.

It has been the intention of the Ministry of Education to improve the level of preparation of Omani teachers throughout the system through both the pre-service and in-service training. Without trained and motivated teachers, it would be very difficult to implement any level of meaningful reform. The Sultan Qaboos University is a powerful influence on what happens throughout the Omani educational system, and meeting this upgrade expectation will have some effect on the curriculum of the University. The full extent of that effect, however, has yet to be seen.

When Sultan Qaboos University (SQU) was established (1986), a top priority was to establish a College of Education where teachers at all levels and specialities could obtain full university-level teacher qualification. With the development of the College of Education within SQU, the four-year B.Ed. became the revised standard minimum qualification for all new teachers throughout the Sultanate. College of Education students planning to teach at the preparatory or secondary levels, while remaining within the College of Education, study a variety of major subjects. They are thus fully qualified to teach within their major subject areas.

In 1995, following a ministerial decision to convert the six Intermediate Teacher Training colleges to full four-year Colleges of Education, students began to enter the new program, which leads to a full four-year B.Ed. instead of a two-year post-secondary diploma. This programme complements the programs at SQU and provides an equivalent level of teacher qualifications.

In 200-2001 the enrolment in these new institutions was as follows:

Ibri for women	*1862*
Rustaq for women	*2036*
Nizwa for men	*1240*
Salalah for men and women	*1083*
Sohar for men	*1381*
Sur for men and women	*1139*

(Ministry of Higher Education 2001)

The Colleges of Education offer three programmes: the first, which prepares teachers for the intermediate and secondary levels, provides for any one of eight areas of specialisation: Islamic Education, Arabic Language, Social Studies (Geography and History), Mathematics, Computer Science, Physics, Chemistry, and Biology. The second programme is for the preparation of primary school teachers. Students enrolling in this programme may select any one of three areas of specialisation: Science and Mathematics; English Language; or Islamic Education, Arabic Language and Social Studies. The third programme is to provide Intermediate College graduates with a BA in Education as required for the teaching profession. This programme, which required 30 credit hours, is offered by the Colleges of Education at Sohar and Rustaq. Under the projected revision of the education system, all teachers in the country will have to complete the B.Ed. or equivalent certification in order to teach in the country.

Evaluation of the Implementation process

As the new programme is phased in, continuous monitoring and feedback is taking place to identify and rectify problems. Review Committees have been established at the central and regional levels. The activities include the following: (a) A technical committee of the Ministry of Education staff visits schools four times a year to evaluate physical and technical needs; (b) A committee of curriculum and training staff from the General Directorate of Curriculum and Training visits schools to evaluate the implementation of the curriculum methodology; and (c) A core team regional committee meets at the local level to provide ongoing evaluation of progress at the regional level. These committees meet regularly and provide ongoing feedback to the Ministry of Education on the progress of the Basic Education reforms.

Evaluations of educational reforms improve their perceived validity as they take into account the views of the practitioners involved. An example of the model is a study by Moroz and Waugh (2000), which studied the receptivity of Western Australian teachers toward a system-wide change intended to assist teachers with classroom planning, student learning, and assessment. In the 1999 study of the Omani General Education reform, Al-Hammami (1999) reported that reactions of Omani educators, inspectors, head teachers, and

teachers were generally supportive of the principles of the reform. There were specific issues that some groups reacted to negatively, however. Educators, particularly teachers, did not support expansion of the school day and year. Some members of the Shura Council questioned the new system, the proposal for a fee for the last two years of secondary education, and the requirement for teaching English from grade one. Perhaps, as a consequence of this discussion, fees have not been applied. As seen elsewhere, there has been a degree of criticism of the educational reforms, notably over the length of days for those in grade 1-4 years.

It can be seen, therefore, that education reform in the Sultanate of Oman is underway. It is based on careful research and preparation. Regular review and evaluation of the programme is planned. These reviews will involve staff at all levels, parents, and students, as well as others in Omani society (Al-Belushi, *et al*, 1999). From these reviews will come recommendations that will be considered in carrying the educational reform effort into the 21st century. One example will serve to illustrate the scope of the resulting recommendations and their potential for impacting on the reform effort.

An example of such a review conducted by the Omani authorities is the Ministry of Education 1998 Report on Implementation of the General Education Reform Project, which involved review of the reasons for reform, the reform activities undertaken, progress on those reforms, and anticipated difficulties. Therefore, it was a wide-ranging report, which addressed many education issues, not just curriculum reform.

The report identifies curriculum development, extension of instructional time, extending geographical availability of educational opportunities, adopting educational technologies, and integrating secondary education more effectively with the employment market as key efforts. Gradual implementation of the reforms starting with pilot schools is anticipated by the Ministry report. The report indicates formation of work committees that have accomplished the following: redrafting educational objectives; abolishing evening schools held in the elementary schools; arranging to start teaching English in class one of Basic Education; converting school libraries to learning centers; modifying the structure of the Ministry to meet the requirements of the reform; and developing the plans and arrangements necessary for developing educational administration, supervision, and training of teachers to the university level. Good progress is reported towards the development of teaching methods for various subjects; developing learning packages for each classroom of the first and second categories of Basic Education; and working with persons experienced in the Scottish educational examination system to develop an Omani examination system. Issues concerning training and distribution of appropriately skilled Omani teachers,

availability of full funding for the reform effort, and general national co-operation with these efforts are perceived as potential problems.

There are many problems still to be addressed associated with the efficacious implementation of the reform not least in the issue of those responsible for implementation feeling "ownership" of the innovation.

This chapter has sought to indicate that whereas the curriculum for Basic Education may indeed serve a useful socio-political and economic purpose, whether it comes to serve an educational one remains to be seen. It has become apparent that one of the key factors in efficacious implementation has been - and continues to be - the educational administration system. Various studies referred to in this chapter have indicated the importance of curriculum reform and the role of key constituents – key players – in any education reform. Notable amongst this group are principals and teachers. Therefore to ensure successful implementation one can argue that certain features are essential. A key is excellence in styles and practices of leadership. Without collegial leadership and ownership within the education systems, it may be that the momentum for the efficacious implementation of Vision 20:20 will be lost. The importance of educational administration (be that personal teacher, principal, or regional director general) becomes a central concern in this analysis of Oman's curriculum innovation and implementation.

To elaborate upon this premise the current educational policy and organisation in Oman. The next chapter outlines various approaches to leadership. Further it discusses those which may be seen as most relevant to the implementation of Oman's curriculum reform by making constant, consistent and coherent references to relevant aspects of the new system.

The following chapter, therefore, will delineate issues connected with education administration and will draw attention to what maybe considered, the most appropriate form of leadership for reform in Oman.

Chapter Four

The Role of Leadership – Reform in Oman School Curriculum

In the previous chapter it was noted that Oman's current curriculum reform will be implemented over the next few years. Attention was drawn to the nature and character of this reform and to the factors which – given international experience on curriculum reform generally – are likely to result in efficacious implementation procedures. It was argued that educational leadership is one of these factors – indeed, as this chapter will argue, it is the main factor. To address those issues, this chapter will indicate through research literature on leadership the complexity of the role of educational administration. It will draw attention to the cultural context within which leadership is developed.

Historically, with Oman being a highly centralised country the development of styles of leadership has not been a prominent feature of the schooling system. Indeed as a centralised system, it reached out for consultants when desiring input rather than seeking the opinions of people with in the indigenous system. Therefore, Omanis working in education had limited opportunity to develop self-confidence in their own leadership skills.

By the late 1990s and now into the 21st century, this paucity of leadership skills has become a problematic for Oman. As the curriculum reform becomes a reality, it is apparent that the success or failure of its implementation lies on the shoulders of the education administrators. Most prominent in this field of administrators are those directly concerned with local schools and regional educational authorities.

Given the foregoing, this chapter will indicate through reference to the literature on leadership, how crucial Principals, teachers and regional directors (administrators) are in the implementation of a reform. It will summarise the research studies on leadership. Following this, alternative style of leadership, within an educational context, is examined. Subsequently the changing role of head-ship and the use of shared decision-making will be discussed; and from this a framework for shared leadership will be proposed.

This chapter is presented in four parts. First, research studies on leadership are summarised. Next cultural leadership within an educational context is examined. This is followed by a description of the changing role of the head and the use of shared decision making in education. Finally, a framework for shared leadership is proposed based on this review of the literature.

Leadership is an interesting area of analysis as it combines theoretical discourse with its practical implications. More than many theoretical discussions, those on leadership allude

to a number of interdisciplinary fields. And as in all fields of study, there are competing theories and models.

Indeed, competing theoretical approaches may be seen as the backbone of discourses in education administration and, taking our starting point from Kuhn (1970), we see how competing paradigms of knowledge come to play a central role in the development of theories.

Kuhn described scientific development as a process that narrates the historical integrity of a scientific community as it seeks to clarify and improve its area of science. As practitioners exchange information about their work in their field, they develop a history of inquiry that establishes a paradigm (accepted model or pattern) that guides the scientific group's research. However, various authors contend that the application of objective procedures (such as the scientific method) associated with natural sciences may not meet adequately the needs of social scientific inquiry and research.

In the social sciences including developing, interdisciplinary fields like leadership; there are a plethora of theories and models competing for dominance. These theories and models are recounted in textbooks, and the reader is left to determine the purpose, usefulness, and/or legitimacy of the theories and models. Disagreements within the field amongst researchers may lead to sloppy use of terminology, varied definitions of terms, and varied interpretations of events.

For example, in some leadership studies, terms such as 'management' and 'leadership' or 'behaviour' and 'style', are used interchangeably while other researchers argue that these terms are mutually exclusive or reside on a continuum (Blake and Mouton, 1982; Likert, 1961; Rost, 1991; Yukl, 1989). As the field of leadership matures, its members may be able to develop agreement within the field, thus reducing the number of theories and models, and indeed, helping to sustain a mutually accepted paradigm for leadership. In the meantime, leadership inquiry must continue to address the inconsistencies and problems that arise in the field while searching for a paradigm.

There has been much research, but no agreement by scholars of a precise, accurate definition of the term "leadership" (Rost, 1991). Rost advocated the acceptance of a mutually agreed – upon definition of leadership as the foundation upon which research can be based and a paradigm built. Furthermore, he pointed out that many studies, based on an industrial paradigm of leadership use the terms leadership and management synonymously, thus integrating two concepts along a continuum where leadership is equated with excellent management (Yukl, 1989). Thus, leadership becomes a matter of degree of management.

However, management – leadership style of administration – is but one facet of leadership. This investigation of the literature will focus also upon transformative and

cultural leadership theories. These examine the relationships that exist in leadership situations, how organisational members develop a shared, mutually accepted culture in which to interact. Thus, the focus of a leadership study may move from the leader and begin to adopt interactive views of leadership. This will be achieved by examining the interrelationships and processes that develop in organisations as leadership is practised. In this way leadership is seen from a constructivist perspective - as noted in Chapter Two - where members of the organisation are asked to define leadership in its specific context. In this perspective organisations, their work, and leadership are shaped through concepts, not rules and structures.

In light of the foregoing, this examination of leadership will begin by describing how an individual's perceptions of power/influence and perceptions of motivation can affect the way leadership is viewed and exercised. These considerations are very important for an understanding of Oman's educational reforms.

Like Habermas (1976) with his concern for education as a force for emancipatory action, Hodgkinson (1983) is concerned that leadership will direct such action towards liberatory goals. In this way the implementation of the Basic Education curriculum, for example, may be seen as more than just technique but, rather, part of a moral enterprise. These are important, rewarding, but perhaps (given the current situation in Oman) highly optimistic goals for leadership.

Rost defined leadership as

> ... *an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes.* (1991:102)

Rost's definition of leadership appears to remove qualifying terminology and to project a definition of a quantifiable, observable, behavioural relationship that may be evaluated according to the criteria within its definition and to be able to influence relationships, between leaders and followers. This involves is intended real change, and mutual purposes. Rost's definition, because of its simplicity and clear terminology, may bring the leadership community to a perspective that can be mutually accepted. But it omits context and situational variables that are associated with leadership and organisations (formal and informal) that influence leadership relationships. Nevertheless, Rost's definition does focus attention on the relationships that develop in leadership situations and the multi-directionality of influence in these relationships.

Early inquiries in leadership were based on the assumption that leaders possess traits and abilities not found in non-leaders. Inquiry then assumes a positivist approach of identifying observable behaviours of leaders that distinguish leaders from non-leaders and measuring the effect of leadership behaviour against other criteria, such as worker

productivity or satisfaction. Extending the behavioural studies are contingency or situational determinant studies that propose that leadership is more complex requiring examination of leader traits, behaviours and moderating situational factors. These situational factors may originate from the work, the environment or from workers themselves. It has been seen in previous chapters that curriculum reform in Oman demands attention to these situational factors.

However, leadership, said Hodgkinson (1983), is more than just degrees of management or situational variables rather it is the effecting of policy, values, and philosophy through collective organisational action. It is the movement of people toward goals.

In previous chapters it was noted that Oman's curriculum reforms posed many problems, not least the processes and procedures for implementation. In light of these difficulties, it has been noted that leadership may come to play an important part in the success of the reforms. Because the development and implementation of a curriculum reform in Oman requires attention it is intended that this thesis will examine situational factors through a constructivist approach. It will become important to develop an historical examination of the role of the principal. This will show how that role has evolved from one of 'management' to 'leadership'. Finally, it will be proposed that a framework, within which shared leadership – so very important, it will be argued, for Oman – may develop. The leadership function of school principals is the key to the success of the efforts at sharing leadership, currently being embarked upon in Oman.

Perceptions that Affect Leadership

The way leaders view superordinates, colleagues and subordinates, affects their behaviour toward and interactions with these organisational members. This includes social perceptions, about how they view others and form judgements about their behaviour. This influences how they behave toward and interact with those people (Hall, 1990). These perceptions are developed through knowledge acquisition and social interaction (experiences). Perceptions of power can influence the way it is utilised and distributed amongst organisational members and levels. Perceptions of workers can influence how leaders interact with superordinates, colleagues and subordinates and how they interpret their actions of these organisational members.

Leaders' Perceptions of Power

Within human systems (organisations and institutions), organisational power is given to those possessing key positions and constitutes the most common source of power in the modern world. Traditionally, power (the ability to influence a psychological change in

behaviours, opinions, attitudes, goals, needs and values) has been viewed as an object or commodity that can be described (types, sources) or measured. Bases or sources of power can be as elaborate as French and Raven's (1968) five bases (reward, coercive, legitimate, referent, and expert) or as simple as Abbott and Caracheo's (1988) two bases (authority and prestige). Purporting power may be exerted downward, laterally, and upward in organisations, Yukl (1989) identified three sources of power – positional, personal, and political.

Perceptions of power influence how administrators relate to teachers. When power is perceived as finite, principals rarely believe that they must give up power to empower teachers. If power is perceived as an infinite commodity available to accomplish goals and mission, principals can expand power by involving teachers in organisational decision-making activities.

Organisational development research during the human relations movement focused on the relationship of increased worker productivity and worker satisfaction. The Scanlon Plan outlined a management philosophy based on the belief that if workers participated in decision-making, one result could be more efficient and effective companies (McGregor, 1960). Based on Scanlon's research, Short and Greer (1997) viewed empowerment in schools as participative decision making. Unlike private sector organisations, schools are "responsible for providing one of the most complex forms of service" (Short and Greer, 1997:14). As a result of improved and expanded teacher training, schools have professionally trained expert staffs. They are capable of applying their understanding of the educational process, gained through a combination of education and job experience, to identify and solve problems as they arise in the classroom and in school-wide curriculum and instructional development and design.

Premised upon the existence of a variety of power bases, Shetty (1978) contended that situational variables (managerial, subordinate, and organisational characteristics) might affect the type of power leaders choose as appropriate in specific situations. Power bases, they argued, should be broadened in order to respond effectively to varied situations. Gardner (1990) viewed sources of power as infinite (property, position, personality, expertise, persuasiveness, motivational abilities) and the possession of one source possible of providing accessibility to other sources.

Identifying three areas – competition, collaboration, and powerlessness – on a power continuum applied to decision making, Blake and Mouton (1990a) presented power as a measurable quantity, where movement along the continuum causes one member's gain in power to result in another member's loss of power. Indeed, autonomy and control are seen as opposites. Smith and Peterson stated that:

> *... a leader's exercise of power resides in the ability to transmit influence by way of a network of meanings, which constitutes the organisation's culture.* (1989:130)

not in qualitative descriptions of power bases. As decision making becomes more complex and ill defined, power is diffused over a broad base to create a new power relationship. Transformative power is not based on organisational structures or management functions but derives its source from the leader's ability to raise consciousness, build meaning, and inspire human intent. Vision, purposes, and beliefs embedded in the organisation's culture empower participants to excel as meanings are found in routine actions; and individuals and the organisation are united by mutual commitment in a symbiotic relationship (Bennis 1986:71). Wheatley (1992) affirmed the dynamic, electric nature of power. She agreed that an engrained definition of power as a measurable resource, sometimes expressed as a piece of the pie, limits the ability to conceptualise power as an energetic force generated by relationships that develop in organisations. When power is viewed as energy, it is seen as a force that can flow freely through an organisation and is incapable of being limited to specific functions, levels, or positions. As researchers expand their inquiry into the new sciences, new conceptions of power may enlighten and inform perceptions of leadership.

Trait Theories

Early studies on leadership were based on the assumption that individuals possessed certain physical characteristics, personality traits, and intellectual abilities that made them natural leaders (Yukl, 1989). Researchers portrayed leadership as a set of one-way directive behaviours through which leaders influenced others' behaviours. These studies compared leaders with non-leaders or successful leaders with unsuccessful leaders to support, through correlational statistics, that possession of specified traits could be a prerequisite for effective leadership.

Stogdill contended that leadership cannot be explained in terms of the individual or group but must take into account the interaction of leader traits with situational variables (Bass, 1981:38). Gardner (1990) supported this contention by stating that the belief that people possessing leadership traits can be effective regardless of the situation is no longer supported. Smith and Peterson's (1989) review of trait research found that these studies provide little uniformity in design because skills were included in trait surveys and traits were examined in a variety of formal and informal organisational settings. Bennis and Nanus (1985) discounted the Great Man theory of leadership as attributing power and limiting the number of potential leaders to birthright. They also refute the idea that great events can transform ordinary people into great leaders.

Behavioural Theories

Leader behaviour theories represent an attempt to determine what effective leaders do by identifying the behaviour of leaders and the effects leader behaviour has on subordinate productivity and work satisfaction. Most leader behaviour research utilises questionnaires, laboratory or field experiments, and critical incidents to examine how effective leaders differ from ineffective leaders in specific behaviours. Three classical research studies in this area were conducted at the University of Iowa.

Studies of leader behaviour at the University of Iowa (Lewin, Lippitt and White, 1939) involved examining the effects on subordinate attitudes and productivity caused by varying the style of leadership exhibited by the leader. Leaders were trained to demonstrate three leadership styles – democratic, authoritarian, and laissez-faire. Authoritarian leaders determined all policies, dictated tasks and task procedures, determined work partners, and used a personal context when giving praise or criticism. Democratic leaders utilised group decision-making in policy determination, provided discussion of work tasks and alternative procedures for goal achievement, allowed subordinates to choose work partners, and gave objective and guiding suggestions when praising and criticising. Laissez-faire leaders gave groups complete freedom to make decisions; provided information only when it was sought; refrained from participating in work tasks; and provided little or no praise, criticism, evaluation, or regulation of work efforts.

In Likert's study (1961), four leadership styles (systems 1-4) were identified: exploitative authoritative, benevolent authoritative, consultative, and participative (democratic). Likert demonstrated that in situations where leaders used consultative or participative leadership, there was evidence of trust, collaborative goal setting, bottom-up communication, and supportive leader behaviour. In situations where exploitative authoritative or benevolent authoritative leadership was utilised, threats, fear, and punishment; top-down communication; and centralised decision-making and control were used to elicit subordinate conformity to organisation goals and productivity standards. Likert proposed that more effective leaders who use participative decision procedures extensively.

Other participative leadership studies (Tannenbaum and Schmidt, 1973; Vroom and Jago, 1988) examined organisation decision procedures where subordinates had varying degrees of influence over decisions made. Improved decision quality and greater decision acceptance were two primary objectives. Levels of participation, dependent upon a superior's willingness to share power, resulted in decision styles that were autocratic, consultative, joint, and delegative. Results were inconclusive because the studies identified subordinate overall satisfaction and performance as the criteria for leader effectiveness.

However, subordinate satisfaction with the decision process and decisions would have given a more relevant and meaningful measurement.

Research on leadership, which has identified and examined leader behaviours and styles that support participative leadership has focused on the behaviours of the leader and ignored the leadership behaviour of the organisational members (Likert, 1961; White and Lippitt, 1990; Vroom and Yetton, 1973; Tannenbaum and Schmidt, 1973; Blake and Mouton, 1978, 1990a, 1990b). Yukl (1994) posited that participative leadership includes power and behaviour leadership approaches because it includes aspects of power (power sharing, empowerment, and reciprocal influence processes), and aspects of leadership behaviour (specific consultation procedures for the generation of ideas and suggestions and specific behaviours for delegation of authority).

Participation can vary from consultation (asking for opinions and suggestions but the leader making the final decision solely or making the decision solely and modifying that decision if people's reactions to the decision are negative before the decision is enacted) to joint decision-making to delegation (giving individuals or groups the authority and responsibility for decision making within specific guidelines).

Use of self-managing teams that operate within boundaries established by upper levels of management, have authority and responsibility for decisions concerning goal setting, quality standards, performance evaluation and improvement, and resource allotment, is popular.

By employing a team concept, internal and external leadership roles may be defined. Internal leadership roles, management responsibilities assigned to and shared by team members, are enhanced by the roles assumed by the external leader who serves as coach, facilitator, and consultant to the team. Communication skills play a critical role. External leaders must be able to communicate goals and priorities and be able to articulate a vision of the potential accomplishments of the team. Through communication, leaders develop in team members self-responsibility for team actions and the skills (planning, organisation, interpersonal, self-management) needed to operate successfully as a team. Formal leadership ebbs as informal leadership

> ... *the capacity of the organisation to create the leadership that best suits its needs at the time* (Wheatley 1992:22)

Contingency and Situational Theories/Models

Contingency theories of leadership effectiveness address the leader's immediate work environment. Early contingency models focused on leader emergence by studying how the

group's tasks and norms determined the leadership skills and values that would be effective in the group and acceptable to subordinates.

Fiedler's (1967) contribution to leadership research represents the first attempt to study leadership by examining the situation, its people, tasks, and organisations. Fiedler[16] hypothesised that leaders can improve their effectiveness by modifying situations to fit their leadership style. In Fiedler's study, leaders rate subordinates to obtain measures that classify leaders as task-oriented or relationship-oriented. Three situational factors are identified that influence leader effectiveness: (a) the quality of leader-subordinate relations; (b) the leader's position power; and (c) the degree of task structure (Smith and Peterson, 1989, : 17). Fiedler's research recognised that leadership results from the interaction of leadership style and situational variables.

Basing his theory of leadership upon the expectancy theory of motivation, House's path-goal theory of leadership focuses on the leader's ability to analyse the task environment and choose behaviours that maximise subordinates' ability and desire to achieve organisational goals (House, 1971; House and Dessler, 1974). To accomplish this, leaders must examine the following situational variables: (a) the subordinates (personal qualities and skills, locus of control, and needs and motives) and (b) the environment (work group, authority system, and task structure) and select one of four leadership styles (directive, supportive, participative, and achievement-oriented) to apply in the specified situation. By increasing the probability of goal achievement and attainment of rewards, leaders can influence subordinate motivation, satisfaction, and goal accomplishment. The subordinate and environment variables will determine the type of influence leadership style will have on motivation, satisfaction and goal accomplishment.

Directive leadership may increase subordinate motivation and satisfaction in situations containing role ambiguity by providing guidance, procedures and co-ordination (initiating structure). Supportive leadership may increase subordinate motivation and satisfaction in situations where tasks are stressful, boring, or tedious by providing consideration for subordinates' welfare and a supportive work atmosphere. Achievement-oriented leadership may increase goal achievement by setting challenging goals and standards while maintaining the leader's confidence in subordinates' abilities to accomplish the stated goals. Participative leadership may increase subordinate motivation in situations where tasks are unstructured by providing subordinates with the opportunity to participate in decision making about task-

---

[16] The writers in this area include (Lunenburg and Ornstein, 1991; Smith and Peterson, 1989; Yukl, 1989; Rost, 1991)

related matters (goals, procedures). Job satisfaction may also increase if the subordinates desire the opportunity to participate in decision making and planning that is related to organisational goals.

Hersey and Blanchard's (1988, 1982) situational leadership theory asserted leader behaviour is based upon two dimensions of leadership, task behaviour and relationship behaviour, that are influenced by one environmental variable, subordinate maturity (Blanchard, Zigarmi and Zigarmi, 1987; Rost, 1991; Smith and Peterson, 1989; Yukl, 1989). As subordinates develop maturity, leaders vary their behaviour by adjusting the amount of task direction and psychological support they give to subordinates. Behaviour variables in leaders (directive/supportive) interact with behaviour variables in-group members (high/low commitment and high/low competence). As the group members pass through different stages of commitment and competence, the leader varies the amount of direction and support given. The leader plays various roles of directing, coaching, supporting, and delegating as the group matures and becomes able to perform group activities.

Situational Determinants Theories/Models

Situational determinants theory defines leader behaviour as determined by situational characteristics (role expectation, group mission and tasks, and flexible role definition) and leader traits and qualities. Leaders' personalities and values may bias their perceptions of their roles; this causes role conflict. Although it states that leaders' expectations of behavioural outcomes influence leaders' behaviour choice, Nebecker and Mitchell's (1974) expectancy theory does not explain how leaders formulate or prioritise their expectation. Osborn and Hunt's (1975) multiple influence model is an attempt to explain the complex interactions of macrovariables (organisation structure and external environment) and microvariables (task characteristics and subordinate characteristics) and their influence in determining leader behaviour. The simultaneous interrelationships of multiple variables lead to complexity of the situation and inability to separate variables into independent variables that can be validated for causality and/or correlationships.

Koestenbaum's (1991) leadership model is an attempt to integrate leadership research strategies – trait, behaviour, contingency, and situational determinants – into one model. The theory looks beyond the individual (trait) and immediate work environment (behaviour and contingency) and examines the interactions of leader traits and behaviour with the macro internal and external environment. Leadership is viewed as a pattern of behaviours and mindset. Koestenbaum contends that leadership can be learned and taught; leaders should use empowerment, delegation, and supportive measures to develop leadership potential in subordinates.

Some of the foregoing models of leadership may be of limited application to the Omani situation. However, there are hopes that transformative leadership may hold a key for greater collegiality and involvement by all in the implementation of the educational reform program.

Transformative Leadership

Burns (1978) examined leadership in a political context by making distinctions among power, leadership, transactional leadership, and transformative leadership. Burns states that:

> *Power over other persons is exercised when potential power wielders, motivated to achieve certain goals of their own, marshal in their power base resources (economic, military, institutional, or skill) that enable them to influence the behaviour of respondents by activating motives of respondents relevant to those resources and to those goals.* (1978:18)

The purpose is to achieve the power holder's goals whether or not the followers share in those goals. However, Burns defined leadership as:

> *The reciprocal process of mobilising, by persons with certain motives and values, various economic, political, and other resources, in a context of competition or conflict, in order to realise goals independently or mutually held by both leaders and follows.* (1978:425)

Burns further differentiated between transactional and transformative leadership. In transactional leadership, persons engage in a relationship for the purpose of exchanging valued things and are conscious of the other's power, usually pursue their own purposes and goals, and form temporary relationships. In transformative leadership:

> *... one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality.* (Burns 1978:20)

In such a relationship, purposes are fused, power bases are linked, and leadership becomes moral as leaders and followers unite to achieve higher goals. Burns based his general theory of leadership on the hierarchy of needs, structure of values, and stages of moral development. The role of the leader is to help followers transcend the levels of need and stages of moral development to achieve mutually held higher purposes. For Burns, the test of leadership is its ability to achieve significant change that represents the mutual interests of followers and leaders. This is significant in Oman because if the current reform efforts are perceived as being in the general interests of the community, that will help to produce long-term impact from the reforms.

In Chapter Three it was noted that benefits of the curriculum reform may exist at different levels: for the student leaving school there may be labour market benefits; for the principal there may be prestige benefits; for the teacher there are possibilities of greater control over the(t & l) teaching & learning process.

Bass' writings are relevant in that he stated:

> *The first order of change – changes of degree – can be handled adequately by the current emphasis on leadership as an exchange process, a transactional relationship in which followers' needs can be met if their performance measures up to their contracts with their leader.* (1985:4)

Bass further argued that second order changes, that is, those that require a change in attitudes, beliefs, and values, require a different paradigm for leadership, which he called transformative leadership.

For Bass, transactional leadership involves three key elements: (a) recognising what subordinates seek from work and attempting to provide the rewards sought; (b) providing those rewards when merited; and (c) responding to subordinates' self-interests when they impact positively on organisational goals achievement. Transactional leadership results in motivating subordinates to attain the desired outcomes (expected performance) of the organisation. Transformational leadership results in motivating subordinates to perform beyond expectations of the organisation, thus emphasising the observable change in subordinates' behaviour. The exercise of transformational behaviour can be accomplished through any of the following methods: (a) raising subordinates' awareness of the importance and value of achieving specified outcomes, and means of goal achievement; (b) persuading subordinates to replace self-interests with team or organisational interests; or (c) altering subordinates' need level or broadening subordinates' needs and wants (Bass, 1985).

Bass's conceptualisation of leadership includes both the idea of expanding subordinates' array of needs and wants in addition to emphasis on raising subordinates' need levels. He emphasises the moral implication of transformational leadership, and contends that transactional leaders work within the organisational culture, the shared values and meanings of organisational members; whereas, transformational leaders work to change subordinates' values and beliefs in order to change the organisational culture. Thus, for Bass,

> *The transactional leader induces performance among followers by negotiating an exchange relationship with them of reward for compliance. Transformational leadership arouses transcendental interest in followers and/or elevates their need and aspiration levels.* (Bass, 1985:32)

The impacts of transactional leadership are not uniform. Leithwood and Jantzi, (2000), reviewing the effects of transactional leadership in a group of Canadian schools, concluded that transformational practices did develop capacity and commitment within the system to a significant degree, and lesser but still significant effects on student engagement within the school system. Here the issue relates to rigidity versus flexibility in leadership types, with the former transaction for instance having a tendency to produce manipulative actions by leaders.

When the organisational system and other means of communication, like words and actions, are also used, compliance of employees becomes more evident. Here opportunities

for employees to develop their ownshared commitment to the organisation's future success appears to be hindered by leaders' evident manipulation to employees.

Social architecture plays a critical role in providing meaning among organisational members. The term associated with communicating meaning – manage meaning – emphasises an interpretation of transformative leadership as unidirectional leadership. Again, emphasis is on actions of leaders that act upon followers. By managing meaning, leaders are influencing and directing the beliefs and actions of the followers through manipulation of the organisational structure and communicated words and actions. The leader is seen as developing commitment within employees, not providing opportunities within which employees can help shape a vision and develop their own commitment to a shared organisational vision.

In Bennis and Nanus' (1985) interpretation of empowerment, power is not residual but dynamic and fluid, moving from one to another. However, this interpretation implies that power originates in the leader, acting as a magnetic pull or energy source, drawing followers to action. Such an interpretation equates empowerment with attitude and power with energy. Although energy is considered as not static or resident but moving throughout the system, they acknowledge power as concentrated in one source of energy -- the leader who drives other components of the system. In many subsequent writing this "system" has come to be seen as socially defined and culturally located.

Cultural Leadership

Deal and Kennedy developed their concept of corporate culture as:

> *The integrated pattern of human behaviour that includes thought, speech, action and artifacts and depends on man's capacity for learning and transmitting knowledge to succeeding generations.* (Deal and Kennedy, 1982:4)

Deal and Kennedy identified values, heroes, rites and rituals, and a cultural network as the four essential components that can ensure the development of a strong organisational culture capable of influencing members' behaviour and their willingness to exert a cohesive, concerted effort toward organisational goal achievement.

Values form the foundation for member commitment to organisational goals and define standards for achievement and success. Shared values can act as an informal control system defining behaviour. To develop a strong system of shared values, management must exemplify these values not only in discourse but also through actions.

Heroes, who personify cultural values and act as tangible role models, demonstrate that personal and organisational success are linked, thus equating an individual's responsibility for personal performance with organisational performance. Heroes,

epitomising exemplary behaviour in daily routine actions and inspiring commitment to visionary goals, provide a vehicle for employee recognition, enhanced motivation, and exceptional accomplishments. Rites and rituals are the rules that define expected behaviour and how values are practised.

Deal and Kennedy (1982) contend that the informal cultural network is:

> *The primary means of communication within the organisation; it ties together all parts of the company without regard to positions or titles.* (1982:85)

Cultural networks are critical of the organisation because they are used to (a) transmit information, (b) interpret the significance of communications/information, and (c) provide an arena for gaining support for proposals or initiatives prior to formal group meetings, or making a presentation, or decision-making.

The purpose of culture, to develop and reinforce a shared commitment to and transmission of values and goals, can be a deterrent to attempts to move an organisation in a new direction. The term cultural transformation may be viewed as an oxymoron. However, various researchers (Schein 1985; Sergiovanni, 1986, 1992, 1994) asserted that culture can be used to achieve change through the building of a renewed commitment to shared values and goals (Duignan, 1989). Management plays a critical role in the success of a change effort. Their daily actions and discourses should demonstrate and reinforce the values and behaviours they desire in other organisation members. Challenging contributions of routine actions to organisational goals, achievements and recognition of individuals' efforts and contributions may strengthen and reinforce a culture. While Deal and Kennedy (1982) directed their attention to the artifacts that evidence the existence of a culture, its development and reinforcement through tangible structures (rules, regulations, values and network) – a management approach, Schein (1985) focused on the cognitive aspects of culture, its beliefs, values, and understandings a leadership orientation.

Schein (1985) argued that creating, managing, and sometimes destroying organisational culture may be one of the most decisive functions of leadership. Viewing culture as affecting how members of human systems think, feel and act, Schein labelled as incorrect the assumption held by some leadership theorists that culture can be changed to suit one's purposes. An example in Oman would be the fact that the teachers have been civil service employees. All of their activities and rewards have been regulated. It may be that elimination of that civil service status will be necessary if the reform movement is to be successful.

Because environmental conditions are constantly changing, leadership must be able to manipulate the organisational culture to ensure the system's ability to adapt to and survive in the environment through the evolution of new cultural assumptions (Duignan, 1989). Leaders

need to know how an organisation's culture can help or hinder mission accomplishment and provide the impetus to implement the intervention strategies necessary to adapt the culture for organisational survival. Although leaders are responsible for replacing or redefining discarded assumptions, organisational members should be involved in the change process to ensure their renewed insight and motivation to achieve the new organisational mission.

Although creating and managing culture may be one of the most important functions of leadership, varied definitions, references and uses of the word culture contribute to the ambiguity and vagueness associated with this term. Schein defined culture as:

> *The deeper level of basic assumptions and beliefs that are shared by members of an organisation, that operate unconsciously, and that define in a basic "taken-for-granted" fashion an organisation's view of itself and its environment. These assumptions and beliefs are learned responses to a group's problems of survival in its external environment and its problems of internal integration.* (1985:6-7)

Schein focused on how such a culture is formed and how group functions build and support culture, drawing from interactional and psychological models of human communication, such as those found in Fisher (1978) when he referred to the shared experiences and shared views that develop from the repeated, patterned actions of group members. These actions, when successful, in meeting group needs, become internalised and automatic. Because of the complexity and size of organisations, subcultures may exist within smaller units as well as in the overall culture of the organisation. These subcultures may be aligned with and support the organisational culture. However, when culture is not firmly established, subcultures may be counter-cultural and at cross-purposes to the organisation.

Leaders responsible for managing and changing culture, should be knowledgeable about how complex beliefs and assumptions are learned and unlearned in cultures. Three levels of culture are identified by Schein (1985). Artifacts, the constructed physical and social environment, should be analysed to determine the meanings attached to the artifacts and how these meanings relate to the group. Values, how people believe things should be versus how they are, form the foundation for the development of beliefs and assumptions. Assumptions, tested and reliable solution to group problems, become the preferred way of dealing with problems and define reality for the group. These assumptions become so internalised and ingrained in group members that alternative behaviour patterns become inconceivable. Difficulty arises when these basic assumptions no longer solve group problems effectively. Bringing these assumptions to a conscious level within group members and having them confront and challenge their internalised beliefs and understandings requires leader expertise in group dynamics, cognitive psychology, and organisation development (Schein, 85). Throughout Schein's interpretation of the three levels of culture is the importance of meaning, how meaning is formed, and how meaning is communicated and shared.

Thus, transformation occurs by either (a) physical or social validation through continued successful application of the values to group activities, or (b) by consensual social validation of social relationships that reduce anxiety and uncertainty in group actions.

Culture critically impacts on varied functions of an organisation. It influences strategy; the integration of units through mergers, acquisitions, and diversification; the integration of technology; intergroup behaviour; interpersonal and group communication; socialisation of group members and productivity. For example, culture can be restrictive, determining and limiting strategies available to the group. An organisation needs to learn how to cope with its culture; manage within its boundaries; and, if necessary, change it culture. In addition, the development of subcultures may lead to intergroup conflict because group identity is built on the premise that groups compare and contrast themselves with other groups to build and maintain their intra-group cultures. Congruency is needed among these subgroups, and the overall organisational culture should override subgroup cultures.

Two basic functions of culture are (a) survival in and adaptation to the external environment, and (b) internal integration to ensure ability to continue to adapt and survive. Problems that deal with the environment are met through mission and strategy, consensually formed goals, consensually developed means of achieving goals, measurement and evaluation of goal accomplishment, and appropriate feedback and correction. Problems that deal with internal integration are met through development of a common language, established criteria for group membership, defined power and status relationships, defined peer relationships, reward and punishment strategies, and methods of dealing with unexplainable, uncontrollable occurrences.

Group strength and complexity are assessed by examining the group norms – their number, stability, and interconnectedness. Little of what defines culture is present in a group that has existed for a short period of time and has limited experience with history or critical incidents. Group members who have varied interpersonal styles, emotional frameworks, and cognitive styles cannot build shared meanings from immediate interactions. Time and common experiences are needed to build a communication system in which all members attach the same sense of meaning to events. These shared understandings help members recognise common feelings, experiences, and activities. However, interdependence among group members can lead to individual vulnerability. Communication theories concerning self-disclosure and personal vulnerability support this contention (Littlejohn, 1992).

An issue frequently encountered when using group processes in organisations is accountability. Norms that produce the greatest success will survive and evolve into assumptions. If group actions are not congruent with reality and the environment, the group's ability to survive will be jeopardised. Accountability is addressed through the group's ability

to survive and grow in its environment. Meeting with repeated successes, the group reinforces it assumptions about itself and its environment and strengthens its culture.

Schein (1985) identified five primary mechanisms for embedding culture: (a) the things that leaders consistently focus on, measure, and control; (b) incidents/crises that can lead to increased intensity of culture learning; (c) visible actions through modelling or coaching that communicate the leader's values and assumptions; (d) strategies/criteria or allocating rewards and punishments; and (e) criteria used to recruit, select, promote, and retire subordinates that reinforce the present culture or lead to the placement of people with differing assumptions in key roles to influence culture change.

Secondary mechanisms, consistent with primary mechanisms, can reinforce the development of culture. Such mechanisms as organisation design and structure; predictable, cyclical system and procedures; physical structures and space utilisation; stories, myths, and legends; and formal organisational statements of philosophy, mission, and beliefs can reinforce organisational culture but do not have the effectiveness associated with those assumptions manifested in leaders' demonstrated actions and beliefs (primary mechanisms). Leaders constantly communicate their assumptions to organisational members. Schein (1995) stated that leaders do not have a choice of whether or not to communicate, but they do choose the extent to which they manage what they communicate.

Although Kouzes and Posner (1987) did not offer a definition of leadership, they describe leadership as a relationship between leaders and followers and as a process, which involves skills and abilities. Based upon their empirical research, both qualitative and quantitative, these researchers identified five critical practices for effective leadership; that is the ability to elicit exceptional performance from organisational members.

One of these practices, challenging the process, relies on the leader's ability to discern when established routines and policies appear dysfunctional, identify opportunities for improvement and advancement, and encourage experimentation and risk taking. Critical to success for this practice is the leader's ability to match challenges with the capabilities of organisational members.

Inspiring a shared vision (an ideal, unique image of the future which gives focus to human energy) considered the most difficult to learn and apply, calls for a leader to be able to communicate the vision so that others find it appealing. To accomplish this, leaders need to (a) appeal to a common purpose while demonstrating to followers how the vision also can meet their specific needs, (b) use a charismatic communication style, one that employs both verbal and non-verbal techniques of language to heighten and animate meaning, and (c) communicate to followers the leader's sincerity. Use of language (inspire, motivate, passion, caring) and non-verbal techniques (touching, smiling, head and body movements)

emphasises reliance on charismatic strategies of leadership in achieving a shared vision and the need to sell the vision so that followers buy into it. Kouzes and Posner (1987) asserted that even though members may participate in the development of a vision, the leader is expected to articulate the vision, to verbalise and present the focus.

Critical to the development of a shared vision is collaboration towards the development of co-operative goals, empowerment, and trust. Development of a shared vision and values and integration of personal and organisational goals and interests provide the psychological motivation for members to accept responsibility and evidence commitment to the organisation. Organisational structures and systems should be constructed that create group tasks that require members to share information, skills, and resources, thus providing tangible signs of collaboration while developing positive interdependence (Covey, 1989). Empowering people to accomplish collaborative goals is contingent upon leaders

> ... *making certain that people have the skills and knowledge needed to make good judgements, keeping people informed, developing personal relationships among the players, involving people in important decisions, and acknowledging and giving credit for people's contributions.* (Kouzes and Posner, 1987:162)

Instead of viewing power as a fixed commodity (a gain by one person implies loss by another), sharing power and organisational functions (decision making, planning) can give all organisational members a sense of influence, ownership, and investment in organisational success. This is particularly important when an innovation such as Basic Education is being introduced into the system. By facilitating and nurturing people's capacities to function successfully, leaders may create a sense of covenant that increases members commitment to the leader and organisational goals (Sergiovanni, 1994). This can lead to a synergistic effect where successful group goal achievement can lead to groups exercising increased competency, power, and responsibility, allowing leaders to concentrate their efforts in areas that facilitate group actions. Organisational members assume a positive, socialised power concern; that is, organisational interests supersede self-interests and service to others and the organisation demonstrates commitment and responsibility (Kouzes and Posner, 1987; Block, 1993).

Shared values, which act as standards for behaviour and give direction to people's thoughts and actions, provide the foundation for corporate cultures. The development of shared values can promote company loyalty, facilitate organisation goal consensus, and promote the development of norms concerning how work is accomplished in a specific work environment. Shared values possess three elements: (a) clarity, all members understand what their organisation represents and why and how it operates; (b) consensus, people understand, share, agree with, and practice a set of values; and (c) intensity, people evidence their regard for these values by demonstrating congruence between values and actions and being faithful to these values. Although values are intangible, a leader's behaviour and actions, or inaction,

communicate and demonstrate to people in the organisation the leader's values and commitment to these values.

Getting people to commit to taking action requires three conditions: (a) providing a viable choice of actions; (b) making these choices or actions visible to others; and (c) making revocation of the choices/actions difficult. Making a choice and acting upon it acts as a bonding solvent that motivates people to accept responsibility for and to utilise their resources and capabilities for the achievement of desired results. Critical to the success of instilling commitment in others is the use of human relations skills that develop social and interpersonal ties among group members. Group cohesiveness not only makes it difficult for members to leave but also reinforces group standards concerning work norms.

The importance of leaders recognising individuals' contributions to organisational success and celebrating group accomplishments represents a forceful requirement for effective leadership. Genuine expressions of caring have the potential of encouraging people to continue to take risks, commit energy and skills, and pursue organisational interests and goals. Sincere encouragement can provide groups with the incentive to continue when tasks become difficult or to renew their commitment to subsequent projects, which may have a higher difficulty factor.

While Kouzes and Posner advocated the use of human relations skills to achieve commitment and develop accountability in organisational members, Block (1993) supported the use of democratic structures to foster commitment and accountability through stewardship and service to the members of an organisation. Such concepts, while interesting in theory, may not be appropriate in practice. A change in governance, in the distribution of power, privilege, and fiscal control, is necessary in addition to changes in beliefs and attitudes for true cultural change. Otherwise, efforts at organisational change are merely cosmetic instead of efficacious.

Block (1993) defined stewardship as willingness to be accountable for the well-being of the larger organisation by operating in service, rather than in control, of those in the organisation. Authentic service occurs when (a) a balance of power exists that allows people to act out of choice, not compliance, (b) commitment is based on organisational/community interests rather than self-interests, (c) all persons participate in defining organisational purpose and culture, and (d) rewards are distributed with balance and equity among all levels. Leadership actions that focus on the leader defining vision, purpose, and goals are incompatible with efforts to distribute ownership and accountability among all levels and members of the organisation.

A political metaphor, governance, was used by Block to substantiate his belief that democratic, participative structures in organisations are needed to effect cultural change.

Block refuted a traditional definition of leadership when he stated:

> *Strong leadership does not have within itself the capacity of create the fundamental changes our organisations require. It is not the fault of the people in these positions, it is the fault of the way we all have framed the role. Our search for strong leadership in others expresses a desire for others to assume the leadership in responsibility for our group, our organisation and our society. The effect is to localise power, purpose, and privilege in the one we call leader.* (1993:13)

Here Block is clear in supporting the belief that democratic participation in an organisational structure is needed for cultural change. He believes that a strong leaderships traditionally assumed to the original form, organisational change is refuted by Block as lacking "the capacity in itself" to created the required fundamental change. Without going any further in Blocks argument one wonders what is referred to by Block as the "strong" leadership. Even if Block refers to the already been introduced to the reader of his "leadership" literature a reminder of it in the present context would be useful. Whatever the term might imply as it is used in the present context, it seems that the mere tendency to search for strong leadership in others who might eventually assume an undemocratic leadership, betray a flaw in the democratic education of is a trait that gives away a flaw in the democratic education of the organisation members. One would assume that a truly democratic environment would be well unmanned against the terminations of any leadership absolute powers

Management was perceived by Block as a set of functions (planning, organising, controlling) that should be exercised by all members, including core workers. The creation of management levels or positions results in a separation of those who manage work from those who perform work, treats management as a position not a function, and reinforces class levels within organisations. Block argued:

> *Having a managerial class aligned with strong staff groups and separated in a hundred ways from those doing the work, is a major obstacle to empowerment and partnership. Having a group of people whose job is to watch and monitor steals accountability and responsibility from those doing the work. Having others define for us our accountabilities, measure us against them, and pay us in accordance with their measurements creates a culture of caution and compliance. Compliance is the antithesis of the emotional ownership that real accountability means.* (1993:46)

Giving core workers decision-making ability and authority to act and letting them make choices about the way the organisation operates, creates accountability within these workers. One of the premises of stewardship is an exchange of control over how the work is accomplished and managed for a promise of commitment -- accountability for results.

Management and leadership were viewed by Block not as positions but as functions performed by all members of the organisation. When management and leadership functions

are integrated into all levels of the organisation and become the responsibility of all, this develops the commitment needed for accountability. However, Block appears to rely on the use of transactional actions to implement his democratic strategies when he proposes that for organisational governance to change from a traditional hierarchical arrangement to democracy practised by all, workers must make a promise to act responsibly and accountably.

Block appears to use stewardship as a theory for shared responsibility, shared accountability. Self-interest is aligned with transactional leadership, extrinsic rewards and punishments, and management-by-exception. Stewardship equates with shared accountability and responsibility derived from intrinsic motivation, shared beliefs, values, and norms – similar to Sergiovanni's (1992) treatment of professionalism. Arguing that control applied through coercion and extrinsic rewards and punishments optimally obtain compliance to rules, policies, and procedure, Block advocated developing partnership and stewardship within all members to create a culture in which self-control, self-responsibility and self-accountability are exhibited through a shared sense of commitment to organisational interests.

Yet at the same time attention is drawn to the problems of statistics brought about through the limitations of "strong leadership". Whereas forceful leadership can have a useful moral edge, strong leadership, Block contends, can be antidemocratic, debilitating and far from the emancipatory potential one now looks for in leadership. Indeed "strong" styles of leadership may come to be seen as not necessarily beneficial for implementing curriculum reform. Rather they may be seen as part of a diminishing commitment to patriarchal forms of control.

Patriarchy, forming the belief that top-level administrators or executives are responsible for organisational success and workers' well being, may be seen to equate with such political terms as sovereignty and colonialism. Traditional management practices, valuing control, consistency, and predictability, place management in a quasi-parental position and render employees to dependency. Patriarchy's major functions are to exercise control by establishing clear lines of authority, maintain consistency through uniform policies and practices, and maintain predictability by defining and measuring output. A result of this strategy is to concentrate ownership and responsibility at top levels, voiding middle and lower levels of accountability.

Without accountability, Covey asserted that:

> *People gradually lose their sense of responsibility and start blaming circumstances or other people for poor performance.* (1990:193)

To ensure commitment and responsibility for goal achievement, individuals should participate in defining acceptable standards of performance and the consequences that will result when desired results are or are not achieved. Multiple evaluation methods may be employed at mutually agreed upon times throughout the performance of tasks formally and/or informally. A macro definition of accountability, reciprocal accountability, is proposed for viewing the entire organisation. Responsible, reciprocal behaviour includes each organisational component assuming accountability for its own performance and that performance's contribution to organisation success. It also includes the ability of organisational components to support and monitor each other's performance. Critical to this definition is the interpretation of control, not as individuals controlling others, but as an organisation being in control – all components working together responsibly to attain organisational goals. This is the intent of the Omani educational reforms.

However, it may be that Oman's educational administration system is tied to conceptions of patriarchy and is not yet ready for these democratic strategies or intensely interpersonal approaches to learning.

To lead a learning organisation, leaders should be prepared to assume new roles and utilise new skills and tools. Senge (1990) stated that:

> *Our traditional view of leaders – as special people who set the direction, make the key decisions, and energise the troops ...*(1990:8)

and reliance on charismatic leadership strategies (focusing attention on crises or events) does not support a systems view of organisations and their environments. Leaders' major responsibility is:

> *... building organisations where people are continually expanding their capabilities to shape their future – that is, leaders are responsible for learning.* (1990:9)

Senge stated that thinking and acting which previously were separated into distinct functions of executives (thinking) and workers (acting) need to be integrated at all levels to equip organisations with the ability to learn at accelerated rates and manage learning of complex concepts and ideas. Leaders need to establish creative tension, the gap that exists between a vision of where the organisation would like to be and the reality of where the organisation currently finds itself. Senge contended that traditional organisations initiate change through problem solving (trying to eliminate undesirable aspects) while learning organisations initiate change through creative tension (creating a new reality while working within the current reality).

In a learning organisation, leaders assume three roles that develop the culture of the organisation. As designers, leaders have three tasks: (a) building a foundation of governing ideas (vision, purpose, values); (b) developing policies, procedures and structures based on the guiding principles; and (c) establishing processes and procedures that ensure learning for

continued organisational improvement. As teachers, leaders aid all organisational members to identify the assumptions they hold within the current reality and to question and challenge these assumptions in light of the vision held for the organisation. As stewards, leaders assume responsibility for the well-being of the people within the organisation and for the mission or purpose of the organisation.

Senge (1990) outlined three critical skills (disciplines) that are needed not only by leaders but also by all organisational members. Two of these skills, building shared vision and surfacing and challenging mental models "held assumptions", are collective disciplines that encompass activities that engage all members of the organisation or team. Although shared vision has been interpreted as the leader's ability to create a vision and ask others to buy into it through the use of persuasive or motivational strategies (Bennis and Nanus 1985). Senge viewed building shared vision as:

> *When a group of people comes to share a vision for an organisation, each person sees an individual picture of the organisation at its best.* (1990:13)

Each views the vision from his/her own perspective. When these perspectives meld, the vision becomes intense and attainable. Surfacing and testing mental models creates a non-threatening, non-confrontational atmosphere within which established assumptions can be examined through the processes of inquiry and advocacy. This academic challenging of assumptions aids discovery of contradictions in beliefs and of distinctions between espoused and practised theories. In Oman this process is currently on-going, and will need involvement at all levels of the system to function effectively.

It is evident that Senge draws from Schein's (1985) work on organisational culture development when formulating his conceptual framework of the learning organisation. Surfacing and testing mental models parallels Schein's work on destroying and recreating culture through the challenging of established assumptions. Unlike Schein, who views the leaders as primary to a cultural perspective of leadership, Senge relies on the collective actions of organisational members. Evident throughout Senge's work is the omission of words such as followers and subordinates. Senge uses the terms people and individuals when referring to organisational members. Terms like people and members seem to capture a sense of equality, which appears to be missing from terms such as followers and subordinates.

The issue of organisational culture is particularly significant in the case of Oman[17]. It has been noted previously that expatriate teachers have historically been a major influence in the Omani educational system. Given the contractual nature of their work, expatriates, in

---

[17] This was discussed in Chapter Three. When it was noted that Oman's Education System is fairly recent and characterize by top down approach to decision making.

general, have a limited investment in the systems in which they work. Replacing expatriate educators with Omani educators who have a vested interest in the system (this has been called Omanisation) may well improve conditions. Indeed it may be found through subsequent field research that the development of a "learning organisation" is best achieved through commitment to a policy process by all people at all levels of its implementation.

Cultural Leadership within an Educational Context

Drawing from transformative and cultural leadership research (Bass, 1985; Burns, 1978; Deal and Kennedy, 1982; Greenfield, 1987; Schein, 1985) Sergiovanni has applied leadership to an educational context. His early work in 1986 on leadership as cultural expression relies on the complex interplay of tactical leadership skills (achieving objectives effectively and efficiently) and strategic leadership (obtaining support for policies and purposes and devising long-range plans) within a framework of ten principles that form a cognitive map for quality leadership. To achieve leadership excellence, antecedents and meanings are needed to provide a basis for and direction to leadership skills. Antecedents provide the perspective, principles, platform (operational framework), and politics (influence others to achieve desired goal) required to guide the leader's decisions, actions, and behaviours. Meanings develop a belief system through purposing (giving meaning to ordinary activities), planning (articulating purpose), persisting (creating a climate through attention to issues, goals or outcomes), and peopling (matching individual and organisational goals and objectives). From the interaction of these components, a culture emerges that defines what is important and governs behaviour. Organisational patriotism, commitment and loyalty to a shared set of common beliefs, and a shared agreement governing behaviour creates a strong bond among organisational members and gives the organisation unique meaning.

Frequently, educational administrators mistakenly equate leadership with authority (the means of gaining compliance from subordinates). Followers (whose performance exceeds expectations and who are influenced by ideas meanings, higher-level need fulfillment, and moral purposes) are capable of achieving excellence because of internalised drive; whereas, subordinates (whose performance is usually marginal) are influenced by external forces.

Sergiovanni viewed schools as organisations that are culturally tight (controlled by norms, group mores, patterns of beliefs, values, socialisation, and socially constructed reality) and structurally loose (less emphasis on bureaucratic rules, management rules, contingency trade-offs, and rational reality). Teachers respond to informal traditions and norms rather than management systems. School improvement programmes that attempt to prescribe teacher actions and behaviours are based on transactional leadership premises that

work well to tightly structured, culturally loose environments. Schools that are loosely structured and culturally tight respond better to transformative leadership for school improvement where order and direction help co-ordinate efforts and develop shared values. Transactional leaders attempt to effect improvement by tightly managing and controlling objectives, curriculum, teaching strategies, and evaluation. By contrast, transformational leaders realise that autonomy in classrooms and schools is inevitable.

Transformative leadership requires purpose, empowerment, density, and commitments: purpose (development of shared meanings and significance that lead to increased motivation and commitment); empowerment (delegation and surrender of power over people and events to achieve power over accomplishments and school goal achievement); density (the extent of leadership role sharing and leadership exercise); and commitments (commitment to the common, shared core values and beliefs of the school by administrators, teachers, and students). Empowerment coupled with purposing leads to increased motivation and commitment in teachers and administrators. Although principals maintain their hierarchical position of accountability, the loosely coupled nature of subsystems in schools may result in other individuals within the school performing leadership activities.

Modifying his perspective on leadership, Sergiovanni further proposed that the present emphasis on instructional leadership in education which requires "strong, forceful, direct leadership from principals" (1992:xi) may not be the type of leadership that effectively can improve schools. Although instructional leadership is capable of initiating large scale, school-wide instructional programs that involve teachers in curriculum re-design and extensive professional development programs, instructional leadership, alone, is not capable of sustaining these initiatives over an extended period of time. Sergiovanni espoused moral leadership, which relies upon the development of substitutes for leadership within the school community. These being capable of initiating and sustaining changes in the school through the actions of and values held by the workers, the teachers. These are crucial considerations for an understanding of curriculum reform and its implementation in Oman.

The fact that educational authority has tended to be highly centralised in Oman is important here. This has presented certain problems. The foregoing has indicated that Oman's education workforce; in large part expatriate labour may not necessarily be committed to reform of the curriculum. In addition, it appears that levels of motivation are low and individual enthusiasm for reform is absent. Further, structures and processes through which transparency in decision-making and accountability in actions appear to be negligible, few and far between.

It has been seen that authority based upon bureaucratic, psychological, or technical-rational authority external force (e.g. cash, promotion, work practices) to induce people to comply survives through.

However, professional authority (craft knowledge and personal expertise) and moral authority (obligations and duties resulting from shared values and ideas) derive from an inner responsibility, shared commitment, and communal interdependence.

These socio-cultural issues impact heavily upon the implementation of an educational programme. Given the previous discussion on leadership, it becomes apparent that these problems may, in fact, be exacerbated by leadership styles, rather, one would wish for a leadership approach which maximised motivation, accountability, enthusiasm and commitment to the reform programme.

It may be that professional development for teachers and principals may require cognisance of moral authority as well as a reliance upon bureaucratic expertise and technical rationally. As Sergiovanni notes, professional authority and moral authority derive from an inner responsibility, shared commitment and communal interdependence. In Oman these attributes may need to be developed further.

Indeed, Sergiovanni identified four aspects of moral leadership, which could provide those who work in the school community with an inner motivation or commitment to respond to and achieve the shared goals of the school. These include (a) community norms – a connectedness that binds community members around a shared set of values and beliefs, (b) the professional ideal – responsibility for one's professional development and serving one's students, (c) rewarding work – teachers perceive their work as meaningful, are accountable for results, and able to evaluate the results of their efforts, and (d) collegiality – connects teachers together with shared support and aid while developing self-management and self-leadership skills thus making principal leadership less necessary. By developing these substitutes for leadership, teachers are empowered and administrators become facilitators as schools develop the capacity to improve from within. However, when schools predominantly rely upon command and instructional leadership, teachers may become dependent subordinates who do what is required of them and little more. Moral leadership, Sergiovanni asserts, necessitates the replacement of the traditional hierarchical structure of schools where those in positions of authority reside at the apex to a structure in which leaders and followers have equal status and the apex is reserved for the values, commitments, vision and covenants that guide community actions. In the Omani context, this is very appealing

In addition to a reappraisal of the role of the school leadership, also expands of the importance of the community in achieving collective commitments to social and education

goals. Sergiovanni argued that maintaining the traditional perspective of schools as formal organisations hinders school reform efforts and that a new perspective of schools as social organisations, communities, is needed to develop meaningful personal relationships and shared values that form the basis for substantive school reform. Community:

> *... a sense of belonging, of continuity, of being connected to others and to ideas and values that make our lives meaningful and significant* (Sergiovanni, 1994:xiii)

is seen as a universal need. Proposing that schools must become purposeful communities in order to provide the necessary structure and direction for school reform efforts, such as curriculum reform and policy development and revision, community becomes the foundation for school reform – the foundation needed to develop culture, empowerment, collegiality, and transformation.

Within a community context, leadership does not rely on "'power over' others, but on 'power to' develop shared visions and goals" (Sergiovanni, 1994:xix) and shares the obligation to lead among all community members. Whereas formal organisations rely upon collective bargaining strategies for satisfying members' needs to establish a sense of we, social organisations rely on commitments, relationships, and interdependencies to establish connections through purposes and shared values and ideas. Community members relate through a belief system and interdependency that they create for themselves. Formal organisations rely on a system of hierarchies, policies, roles and role expectations to define relationships. In a system the size of the Omani educational structure formal organisations (such as regional districts and schools) do exist and function, but informal communities (involving parent associations, women's associations). The principal of the school community becomes key player, as he/she is required to exercise great influence on outcomes.

To move schools to higher performance levels, emphasis on meeting members' needs, improving interpersonal relationships, and building trust need to dominate the actions of principals.

The Evolving Role of the Principal

In Oman as elsewhere, traditionally schools functioned as structured bureaucracies with clear divisions of labour, lines of authority, rules and roles. Principals were expected to maintain these established structures and implement centrally developed policies and directives. Teachers were expected to follow directives and fulfill job requirements preparing lesson plans, maintaining class control, completing required paperwork, following centrally approved curricula.

Today, however, principals are being asked to implement strategies and policies, such as group-based learning and parental involvement in schooling, that may best be achieved

through transformative and cultural leadership styles of action and so use communication skills in new ways and situations (group/team goal accomplishment, vision/values transmission). They may also use group processing skills to manage work in new ways (shared decision making, school-based management); and use expertise in instructional management and design and strategies to build processes for and personnel commitment to the improvement of teaching and learning. Principals, therefore, are important in any process of reform. Beck and Murphy contended that:

> *Principals must find their authority in their personal, interpersonal, and professional competencies, not in formal positions' they must cultivate collegiality, co-operation, and shared commitments among all with whom they work.* (1993:15)

These review of the changing expectations that principals have found themselves asked to meet, focus on the diverse demands placed on them and strategies developed by them for accommodation of social and educational goals.

Emphasis on hierarchical structures, scientific strategies and bureaucracy in education saw Principals in a role with clearly delineated power and responsibilities. Beck and Murphy felt that the belief that casual links can be established between educational actions and outcomes placed accountability for educational results with principals. However, principals, relying on uniform and standardised instructional and scientific management strategies, attempted to solve complex problems of diversity, equity, and quality with simple, quasi-scientific solutions (Beck and Murphy, 1993).

Effective schools literature places an emphasis upon the principal as the key and critical ingredient for school and curriculum improvement. This has created a mythological representation of the principal as the instructional leader (Deal, 1987). Deal states that whilst this research has not provided empirical evidence, established within a cause-and-effect context, increased attention to instructional leadership will result in greater student performance. Previous research has focused on instructional leadership as a technical, rational function related to supervising, evaluating and improving the instructional delivery within school buildings. This results in a functional perspective of leadership that engages the instructional leader in roles that emphasise a human resource (focused upon people, organisational effectiveness, and morale) or structural (focused upon productivity, role specialisation, goals, and instructional technology) as well as a process view of the school organisation (Deal, 1987). However, if instructional leadership is defined to include the culture, politics, and power relationships within schools, the instructional leader, through negotiation, conflict resolution, and culture building (values, symbols, ceremonies, rituals) performs a role that is complex, directly and indirectly influences school performance, and utilises a variety of leadership perspectives.

Hoyle (1988) argued that previously it was considered the leader's responsibility to develop a school-wide mission, convey this mission to school members, and gain their support and commitment to achieving that mission. In this context, mission, defined as a cluster of goals based on beliefs, attitudes, and actions, is similar to definitions associated with the term vision (Hoyle 1988:35). Acknowledging the loose coupling found in school cultures, Hoyle contended that a balance between classroom autonomy and system-wide control may be achieved through the alignment of teachers' personal classroom missions within a school mission. Research in this area has found that teachers respond favourably to heads who provide coherent school missions and leadership actions (Nias, 1980).

In their account of instructional leadership, Smith and Piele (1989) argued that teachers are not influenced by a principal's status, position, or ability to reward and punish but by the teachers' perception that the principal is expert, competent, and able to empower and inspire others. Two types of educational leadership have been identified by these researchers: (a) leadership that is based upon a sense of purpose or direction, such as educational excellence; and (b) effective leadership that casts the school leader in a role of strong instructional leader.

However, effective instructional leadership at the level of principal was described by Blasé and Blasé (2000) as including talking with teachers to promote reflection and professional growth. These were described as having strong enhancing effects on the teachers emotionally, cognitively, and behaviourally. Effective educational leadership, they said, incorporated collaboration, peer coaching, inquiry, collegial study groups, and reflective discussion into an overall approach that created a climate of professional dialogue among educators.

Leithwood and Montgomery (1986) described four stages of growth as the principal matures in the role: the administrative, the humanitarian stage, the programme manager, and finally the problem solve (Hoyle, 1989).

Although principals perform numerous activities that have varied impact on the instructional programme (Hall, Mackay and Morgan, 1988), Weber (1989) has identified five critical components of instructional leadership. Weber contends that principals may directly influence the instructional programme by: (a) defining the school's mission and developing common goals and a vision to establish a shared sense of direction for employees in loosely coupled school organisations and making visions and missions a reality, by articulating and demonstrating a commitment to these ideals; (b) managing curriculum and instruction by having knowledge of trends in content areas, media, instructional processes/programs, and instructional strategies/approaches; (c) promoting positive learning climate by raising teacher expectations of students' achievement abilities, establishing a link between daily activities

and student achievement, rewarding and recognising academic achievement, and protecting time devoted to instruction while ensuring that the quality of this time is maintained or improved; (d) managing instruction through the observation and evaluation of teachers' instructional strategies; and (e) assessing and revising the instructional programme through formative and summative evaluation, matching the intended curricula to the actual curricula and classroom practices, and obtaining teachers' perceptions of the programme's effectiveness. Although instructional leaders use a variety of leadership styles ranging from centralised authority to facilitative to teacher autonomy, Weber identified three traits common to successful principals: (a) style flexibility in varied situations involving student needs; (b) willingness to attempt various innovative strategies while consistently trying to achieve the goal of improved student achievement; and (c) imbuing their vision, mission, and goals for their schools in the performance of daily school activities thus connecting and reinforcing their instructional programme with the entire school program.

Effective leadership also involves consideration of how experienced the person being led is. New employees may need specific direction in what is expected and how it is to be accomplished. At a second stage motivation of the employee may involve agreement on what is to be done but leaving it to the employee to determine how it is to be done, and providing feedback about the results. At a third stage positive and negative feedback may be all that is needed. Finally, some self-motivate employees may be left on their own to complete tasks (Everard and Morris, 1996).

In their research with principals, Smith and Andrews (1989) found that principals expressed frustration with their role. Some principals perceive an imbalance of authority and responsibility between central level and building level administrators. The principals view themselves as delegated inadequate authority to lead and operate their buildings as effective instructional organisations while being held accountable and rewarded for efficient, well-managed schools. Contrary to this belief, an examination of the principal's daily activity found that principals who are effective instructional leaders are capable of managing their time so that instructional matters are the focus of their discretionary time. In most cases, effective principals are strong instructional leaders as well as strong building managers. This is a model that the Omani educational reforms intend to encourage.

Instructional leadership at this level grows out of an underpinning of core personal values (Day and Hadfield, 2000). These values involved the modelling and promotion of respect for individuals, fairness and equality, caring for the well-being and whole development of students and staff, integrity, and honesty.

The influence of the human relations movement resulted in a Principal's leadership relying less on a delineated power base and technical expertise and more on the use of

interpersonal skills to influence and persuade subordinates. Dissatisfied with the hierarchical leadership model, formal control was reduced as skills in negotiating, bargaining, and persuading were emphasised, thus focusing on the personal and political dimensions of the Principal's role. Although this emphasis on human relations and including teachers in the decision process gives the appearance of equality in organisational relationships, Principals inevitably retained final decision-making power.

Demands from the public, government, and business sectors for the improvement of student academic outcomes resulted in the principal's role shifting from a predominantly managerial role to one that emphasised instructional leadership skills. This was described by Coleman (Bush and West-Burnham, 1994) as a dual role, that charges the principal with

> *... appropriate management responsibilities, but also [with] a role as a leading professional in education.* (1994:63)

To achieve this leadership role, principals were expected to solve problems, provide necessary resources, create visions, and lead subordinates in achieving those visions, thus also assuming the role of a change agent. Although the early reform efforts reinforced the traditional hierarchical bureaucratic educational structure through legislated, rigidly applied, and quasi-scientific educational mandates, these later reform initiatives brought attention to restructuring efforts that emphasised participation and shared power among administrators, teachers, and parents (Berry and Ginsberg, 1990). Instructional leaders were required to recognise the existing norms, culture, and resources of a school and apply strategies of persuasion and change to maintain and/or enhance the school culture and norms that positively impact upon the instructional program.

It may be said, therefore, that schools are ineffective because they are managed as though they are self-correcting and have interdependent members, consensus on goals, and predictable problems and solutions. Because none of these situations apply to schools, principals should rely on management of symbols to unite the loosely coupled organisation. Stating that schools are simultaneously tightly and loosely coupled organisations, Sergiovanni (1984) felt that excellent schools have a clear sense of purpose while providing staff members with the freedom to determine how they will achieve that purpose.

Acknowledging the loose coupling of schools, Firestone and Wilson (1989) argued that principals can provide a tighter structure by using cultural linkages to influence the delivery of the instructional programme in their schools. Cultural linkages can be used to influence task definition and task commitment through principals' manipulation of symbols, icons and rituals. principals can also become a cultural expression of their schools through demonstrated modelling, daily routine, and commitment.

For cultural manipulation to be effective, principals must be able to weave both bureaucratic and cultural linkages to create an impact on curriculum and its delivery. However, limits may be placed upon the principal's authority by external policies (district policies, judicial decisions, legislated mandates) and superordinate and subordinate members' inclusion in the decision making process. To ameliorate these influences, principals can capitalise upon the ambiguity that exists in school organisations. Principals may interpret policies to influence favourably their instructional programme and intercede on behalf of teachers to improve and/or protect the instructional climate and the vision of the school.

Vision was regarded by Greenfield as a quality possessed by instructional leaders and present in effective schools when he defines instructional leadership as:

> *Those actions undertaken to develop a productive and satisfying work environment or teachers and desirable learning conditions and outcomes for children.* (1987:56)

In describing effective leaders, Greenfield used qualifiers such as goal-orientation, self-esteem, tolerance for ambiguity, analytical perspective, sensitivity to dynamics of power, proactivity, control and initiating actions, relations-orientation, and collaborative and collegial relations. This author concluded that the principal's personal qualities are instrumental to dealing with varied relationships and situations within the school culture. Greenfield addressed the question of how leaders can evolve, convey, and achieve vision while performing in a role where conflicting value judgements and interpersonal communication are intensive.

Using the term moral as the application of an accepted standard of goodness, Greenfield (1987) referred to moral imagination as:

> *The ability to see the discrepancy between how things are and how they might be – not in terms of the ideal, but in terms of what is possible.* (1987:16)

Once the principal has been able to analyse the school situation and formulate a moral vision, the principal must be able to convey this vision and enlist the supportive actions of the school community members. To achieve this, the principal must develop a consensus among teachers in defining the situation and prescribing actions.

Like Greenfield, Sergiovanni (1994, 1992, 1986) proposed that shared leadership practised within a collaborative cultural context may be capable of enhancing the abilities of social organisations to realise visions and achieve goals. Sergiovanni added a moral dimension to leadership that allows for the creation of a covenant of shared vision, values and commitment that can unite and drive members to develop an effective, successful organisation. However, Sergiovanni asserted that transactional leadership has a role to fill within such an organisation; this can be seen in the need for instructional and technical leadership expertise and skills.

In the work of Burns (1978) and Greenfield (1987) there is a call for a moral aspect to leadership. Burns translated this moral aspect as the ability to raise followers to higher levels of motivation and morality. Both Bass (1981) and Sergiovanni (1994) asserted that the practice of transformative leadership can result in the ability of organisational members to achieve beyond expectation because of the intrinsic self-motivation and accountability that develops in members who are committed to a shared vision, set of values, and professional covenant that are incorporated into their actions and thoughts.

Implication for Oman

In light of the foregoing it appears that shared leadership and a collaboration culture for decision-making are supported by a wide range of education writers. Further, this approach, it is argued, may be most appropriate for the implementation of curriculum reform in Oman. The introduction of the Reform may have impacted considerably upon the principals' activities – especially in terms of collegial decision-making, development of LRCs and of more flexible classroom structure. In addition, principals are expected to involve parents more directly in the processes of teaching and learning in schools.

The importance of this shared leadership approach to the current research will become apparent in subsequent chapters. At the present time, it is crucial to conclude by drawing attention to what one might argue are the critical components for shared leadership and the development of collaborative cultures.

From the foregoing it appears that there are six main features of efficacious leadership: shared vision; developing a commitment to values; seeking way's to improve communication; building strong and vibrant relationships; developing collaboration; and enhancing processes of accountability.

Shared vision relates to organisational clarity about purpose and direction that is created and shared by organisational members. Developing values among and with group members leads to coherent organisational behaviour through consensually held shared beliefs that members use to shape their behaviour. Once vision and values are formulated by group members, they are continually and clearly communicated by leaders to focus and guide organisational member's actions. Seeking improvement relates to group members' questioning, evaluating and challenging present practices in relation to vision and values and seeking improvement in these practices in order to reach organisational vision and goals. Building relationships forms connections among organisational members that strengthen their skills, abilities, and commitment to organisational success. Developing collaboration results as group members work together in team structures to consensually develop actions for organisational goal attainment. Building accountability enables group members to accept

responsibility for their actions and the effect individual's actions have on other's actions while maintaining commitment to organisationally agreed upon goals and actions.

These six features of the moral and shared leadership approach will form the basis of the field research and their methodological relevance will be expanded upon in the next chapter.

In the current stage of reform, Oman is focusing its attention on both national and international levels. Oman has developed a national standards-based curriculum congruent with standard-based curricula formulated by developed nations that are globally competitive. Concurrently the Ministry of Education is evaluating its present educational system to align and integrate educational levels and institutions so that they are positioned to meet national educational and economic needs. Through the 20:20 Vision plan created by the Ministry of Planning and Development, Oman has directed its energies and efforts to optimising its human resources as well as diversifying its economic base.

However, as the Omani educational system becomes more loosely coupled because of the increase in enrolments and the growth of the educational system with more and larger schools, it will become difficult to maintain the past tight control over classroom practice through inspection/observation by regional personnel. The need for tight hierarchical control over teachers may lessen as the teaching force becomes Omanised.

In addition, a standards-based curriculum introduces complexity of subject matter and performance demands placed on students result in the need for variation in teaching and learning strategies to enable all students to be successful at these higher level learning tasks. The introduction of new curriculum and standards that relate to technology, science labs, and media resource centres will require new learning experiences that involve students in new and novel strategies that do not conform with traditional teaching methodologies or take place in the traditional classroom situation.

Students' needs may vary by region or school because of the increased size of the educational system and student population. Changes may have to be made at the classroom level. Research supports cultural leadership and organisational development as effective strategies for this to happen. As complexity and variation are introduced into the national education system from the domestic and foreign environment, traditional hierarchical management of the educational system will not be able to adapt and respond effectively and efficiently to system needs. Regional, school, and teacher autonomy needs to be developed so that all parties become partners in a leadership role for implementing the new curriculum, standards, and innovative practices at the classroom level. In this way, new styles of leadership become essential.

Shared leadership does not imply the absence of leadership. As teachers assume leadership roles in curriculum innovation, a fully collaborative effort between principal and teachers will ensure effective instructional practices. When principals create the norms for a professionally accountable, collegial community, effective teaching by motivated, self-managed teachers may result (Smith and Piele, 1997).

This type of leadership needs to be diffused throughout the organisation. Because of the loose structuring of schools, the development of a tightly united culture provides the impetus for members to work collaboratively and collegially toward a vision and goals that are agreed upon and deemed noble by all involved parties. Within such a school system, members are willing to move between leader and follower-roles to lend their expertise or help to accomplish system, building and classroom goals.

At the national level, the Ministry of Education develops policies, standards, curriculum resources, and assessments for both the student body and the school. These actions contribute to the creation of the nation's/school's culture: improving present practices, building relationships, working collaboratively, and accepting accountability for actions and results. The national administrators with regional and local constituency representatives determine the means for achieving shared planning and decision making-practices.

At the regional level, personnel work with local schools to disseminate and facilitate implementation of national directives and documents. Regional staff performs formative principal and teacher evaluations to aid in the design and development of regional staff development programs. These programs include training in team, instructional and technology skills needed to implement the 20:20 Vision.

At the school level, a commitment to collaborative practices needs to be developed before a curriculum leadership council, composed of principal and teachers, can be formed. It is this council's responsibility to develop a school culture that engages all school personnel in implementation of the national standards-based curriculum through alignment of this curriculum with teaching practices and the development of innovative classroom teaching and learning practices. As schools align their practices with national standards, desired student learning and achievement results, accountability to the Ministry of Education and the public is enhanced through national assessments and school assessment reports.

From these actions, councils fuel the activity of each school building. Principals play a critical role in encouraging teamwork and collaboration and in aligning national goals with building goals and actions. Because personnel have a direct link to students and instruction, principals are in a strategic leadership position and have critical responsibility for developing relationships among building personnel, for encouraging staff members to challenge existing

processes and programs, and for enhancing student achievement opportunities and efforts through collaborative strategies. Allied to this is the principal's responsibility for providing opportunities for developing and strengthening personnel accountability and commitment.

In Oman educational organisations have been seen to be highly bureaucratised with control over curriculum reform being held by the central administration. Current educational reform, notably the 20:20 Vision and a standards-based curriculum may require changes in such a bureaucratic and centralised administration.

Indeed the preceding review of the literature has described the development of leadership theories as important in the implementation of educational policy. They have evolved from a focus on the individual leader to a holistic or systems approach that has examined the processes and interrelationships existing within organisations. This examination of the role of the principal has indicted an emphasis on instructional leadership, change strategies, and human relations skills. Based on cultural leadership theories, the current emphasis for reform, and the involvement of school members in educational improvement strategies, a framework for shared leadership has been advanced.

From the foregoing, it can be seen that principals and teachers expect and need to be involved in the development of a culture conducive to initiating reform and innovations within their schools. It would appear that such involvement is always a precondition of efficacious implementation of an educational policy. It has been noted that there are a number of factors that may be developed within school cultures that can aid such involvement. These six factors have been identified as sharing vision, developing values, seeking improvement, constructing relationships, developing collaboration, and building accountability. This study will attempt to evaluate the presence of these factors by identifying a range of behaviours of principals and teachers, which are characteristic of them. These wide ranging behaviours will be analysed to determine the extent to which they are encompassed within these six factors. How far these behavioural factors are exhibited by principals and teachers in a school and how these behaviours may influence the development of a collaborative culture in schools will become the focus of this research.

The research challenge, therefore, is to study schools that will implement the standards-based curriculum to delineate the leadership strategies exercised by Principals and teachers to determine if the six factors identified in this "shared leadership" framework, do, in fact, exist and, if so, the extent of their existence.

Chapter Five

Methodology

Theoretical Background

As noted in Chapter Four, early leadership studies looked at the causal relationships among the isolated variables. The interpretation of leadership has been summarised as a progression of various theories. This progression began with theories that focus on relatively few isolated variables. For the past twenty years, educational literature has treated instructional leadership as a separate entity from curriculum and instruction. Greenfield's definition of instructional leadership as "strong building-level leadership focused on instruction" is vague in defining what leadership encompasses (Greenfield, 1987). A review of the educational literature also defines instructional leaders (i.e. principals) uniquely from teachers. Principals are described as individuals, who guide teachers and learners toward productive learning, solve problems, provide resources, create a vision for the school, and act as an agent for change. Teaching was done in relative isolation of individual classrooms where teachers followed prescribed curricula and relied on publisher-generated textbooks and supplementary resources.

Soon these theories and practices were followed by more sophisticated theories that recognised the interactions of several variables. Most recently, instructional leadership theories regard leadership not as a person or a function, but as the composite effects of people, and their roles, situations, and elements (controllable and uncontrollable) in the given environment (internal and external). In these current theories, all of these components have the capability of influencing the ability of an educational system or school to improve and to succeed in achieving its mission and goals. It was noted previously that yesterday's belief that a powerful individual could inspire and lead schools to high achievement, is being replaced by the realities of a world in which problems are too complex to be solved by a single individual. In today's society, in which globalisation is evident, standards-based educational systems place ever-greater pressure on teachers and students to perform at higher levels. Ideally, working together as a team, both the principal and teachers integrate and synthesise a variety of perspectives, experiences and knowledge as they interact collaboratively to develop an educational environment so that every student has the necessary instruction and personal resources to meet and exceed these challenging standards.

Throughout the previous chapters, the importance of team structures for effective leadership and goal accomplishment has continually resurfaced. From early research (Likert, 1961; Blake and Mouton, 1978) to recent findings (Kouzes and Posner, 1987; McGregor, 1990; Wheatley, 1992; Sergiovanni, 1992, 1994), teamwork, collaboration, shared

responsibilities, and shared leadership have surfaced as necessary components for adaptation to environmental and organisational needs, goals accomplishment, and organisational success. A shared leadership framework relies on the premise that teamwork, based on collaboration, strong relationships, and shared values, is necessary for achieving desired goals. Such teamwork requires consensus on (a) goal and vision definitions, (b) the identification of the means by which to achieve these goals, and (c) the commitment to and acceptance of responsibility and accountability to continuous improvement and achievement of these goals.

In summary, current research argues that Standards-Based Education depends upon a co-operative approach to instructional leadership within the school community, where the principal and teachers jointly assume the responsibility for leadership, curriculum and instruction. The integration of leadership with curriculum and instruction is critical to the development of a school culture within which high performance is valued and pursued by all members. Although the quality of instructional delivery is critical in standards-based education, the level of student performance and quality of that achievement are the ultimate factors used in accountability measures.

Before the 20:20 vision and the RDGE, the Ministry of Education in Oman utilised a traditional bureaucratic, top-down organisational structure for curriculum development and implementation. As a result of the reform initiatives taken by the Ministry, some leadership capacity has been relegated to the General Directors of regional districts. In turn, principals have more authority to institute changes in their schools. Presently, the plan calls for teachers to also assume an instructional leadership role in the classroom, and to work collaboratively with other teachers as well as with their principals.

These concerns, led to this study to provide a research-based facts of what current and specific efforts principals in Omani secondary schools are making to develop collaborative strategies among teachers and principals, as they implement innovative strategies that address curricular concerns and students achievement. Because leadership is a complex, interdisciplinary subject, researchers may focus on many different aspects of this phenomena. Traditional positivistic studies of leadership are capable of analysing and verifying only what can be observed and measured in leadership usually against some arbitrarily designated criteria, such as worker satisfaction or production standards. However, an inquiry is based on the consensus of individuals' perceptions of leadership within a given context by constructing meaningful suggestions or comments from their experiences. The present study attempts to achieve a balance between both approaches, in order to obtain quantitative and qualitative data that can highlight the practice of educational and curricular reform efforts in Oman.

The implementation of the Reform and Development of General Education has been gradual (as discussed in Chapter Three). It is the intention that this will be formally introduced in the secondary schools (grade 11-12) and when this happens, workshops will be conducted to introduce the curriculum development to the staff. These workshops will focus on student-centred learning and introduce methods for implementing the new curriculum into daily activities. As defined by the Reform and Development of General Education (1995) that has been prepared by the Ministry of Education, the principals will be responsible with the implementation at the school level of the standards-based curriculum. Thus, the role of the principal is considered crucial for successful implementation of this programme.

The primary question that the present study to address as to what extent do Omani secondary school principals exhibit leadership behaviours that foster the use of collaborative practices within the school culture. In order to address this question, the present research has sought to achieve two goals. Firstly, to identify both principals' and teachers' perceptions of both school principals' leadership behaviours and teachers' behaviours that support a collaborative culture. Secondly, to determine if there was a relationship between a principal's leadership behaviour, as perceived by the teachers, and the teachers' perceptions of their own behaviour, that would indicate the presence of a collaborative culture among teachers and principals. This study incorporates a systems theory approach to leadership, acknowledging the interrelationships and interactions of individuals, as well as components within and beyond any single person's control. Indeed, developing a successful leadership vehicle involves analysing unique environmental and situational factors, as well as measuring the majority of member categories within the organisation/school. It follows that the specific questions that were investigated by this research were:

1. To what extent do Omani principals exhibit leadership behaviours that foster a culture

   of collaboration among teachers and principals (a) as perceived by the principals and (b) as perceived by the teachers?

2. To what extent do Omani teachers exhibit cultural behaviours that fosters collaboration among teachers and principals (a) as perceived by the principals and (b) as perceived by the teachers?

3. Does any direct relationship exist between principals' leadership behaviour as perceived by teachers, and the teachers' perceptions of their own behaviour, that would indicate the presence of a collaborative school culture?

To address these questions, the present study gathered information from Omani Secondary School principals and teachers utilising survey techniques using both open and closed items. All participants were initially asked to fill out surveys. These were later

followed by in-depth interviews on a small sub-sample of participants.

Survey Methodology Background

Most transformative, cultural, and participative leadership research utilises the survey technique approach. While these studies acknowledge that influential relationships are reciprocal and multi-directional, most of these studies focused attention on the formal leader's and followers' perceptions of the formal leader's behaviour only (Bass, 1985; Kouzes and Posner, 1987; Sashkin and Walberg, 1993). Included in these surveys are general items that pertain to leadership, and these surveys were constructed so that they can be applied to leadership in diverse organisational contexts, e.g. businesses, governmental agencies, education, social agencies, etc. (Bass, 1985; Kouzes and Posner, 1987; Sashkin, 1988). Results, therefore, have been generalised across a variety of leadership contexts. A difficulty with this approach, however, is that the generalisability of these items leads to respondent interpretations of items that are unknown to the researcher. Shared leadership theory research contends that shared leadership results in the development of a collaborative culture in which all members (i.e. leaders and followers) consensually lead and work for school success. Therefore, it is proposed here that research that specifically examines *shared leadership* must extend beyond the exclusive examination of perceptions of the formally designated leader. In particular, evidence of other organisational members' exercising of leadership actions (that are aligned with the leader's actions and organisational vision and goals) is needed in order to determine if leadership is indeed shared and if a cohesive culture is forming.

A review of the literature failed to identify any methodology that pertained to reciprocal leadership behaviours specific to an educational context. Specifically, there were no methods that measured behaviours exhibited by both principals and teachers (viz. to principal leadership behaviour and teacher collaborative practices and their relationship to the formation of a culture that fosters collaboration among teachers and with principals). Further, there were no survey methods that measured the *perceptions of both* formally designated leader as well as the other members of a given organisation. Thus, the researcher developed a survey method specifically for the purposes of the present study.

Methods Development

Factors specifically associated with leaders' as well as members' behaviours in the development of a collaborative culture were identified from the literature. These six factors were translated into six operationalised items: (1) sharing vision (2) developing values (3) seeking improvement (4) building relationships (5) developing collaboration and (6) building accountability.

Sharing vision relates to organisational clarity about purpose and direction that is created and shared by organisational members (Bennis and Nanus, 1985; Greenfield, 1987; Kouzes and Posner, 1987). Developing values among and with group members leads to coherent organisational behaviour through consensually held shared beliefs that members use to shape their behaviour (Deal and Kennedy, 1982; Schein, 1985; Kouzes and Posner, 1987; Sergiovanni, 1992, 1994). Once group members formulate vision and values, they are continually and clearly communicated by leaders to focus and guide organisational members' actions. Seeking improvement relates to group members' questioning, evaluating, and challenging present practices in relation to vision and values and seeking improvement in these practices in order to reach organisational vision and goals (Schein, 1985; Kouzes and Posner, 1987; Block, 1993; Senge, 1990). Building relationships form relates to relationship among organisational members to strengthen their skills, abilities, and commitment to organisational success (Likert, 1961; Kouzes and Posner, 1987; Senge, 1990). Developing collaboration results when group members work in team structures consensually to develop actions for organisational goal attainment (McGregor, 1990; Blake and Mouton, 1978). (Building) Accountability enables group members to accept responsibility for their actions and the effect individual's actions have on other's actions while maintaining commitment to organisationally agreed-upon visions & missions (Covey, 1990; Wheatley, 1992; Block, 1993; Sergiovanni, 1992, 1994). Each factor comprises a survey subgroup that describes and measures principals' and teachers' perceptions of leadership and school culture.

The researcher developed four versions of a leadership survey that contained items for each of these six leadership factors. Two versions of the survey were developed for principals. Of these, one measured the principals' perceptions of their own leadership behaviours, while the other measured the principals' perceptions of the leadership behaviours exhibited by the teachers (i.e. collaborative culture among the teachers). Similarly, two versions of the survey were developed for teachers. One measured the teachers' perceptions of the leadership behaviours exhibited by the principals, while the other measured the teachers' self-perceptions of their own collaborative leadership practices.

To increase confidence in the validity and reliability of the surveys, several procedures were followed during the development of these questionnaires. First of all, survey items that describe behaviours associated with principal and teacher participation in shared leadership were drawn from the literature. Then, a panel of 5 practising educational administrators was asked to categorise these behaviours into the six factors of leadership. Items that had overall agreement of at least 3 of the 5 administrators were included on the survey. A majority of these items (i.e. 86%) had overall agreement of 4 of the 5 administrators. Finally, revisions

were made to the survey items and six leadership factors were operationalised into survey items that were developed and evaluated in a manner ensuring that they measured the concepts identified and supported by the literature. Once this was completed, the questionnaire was translated into Arabic for reliability analyses.

The purpose of testing a method for reliability is to assess whether participants are consistent in their responses (thereby reducing measurement error). To estimate the reliability among the survey items, a pilot study was conducted by the researcher. In the pilot study, inter-item consistency was estimated by administering the surveys of principal leadership and collaborative culture to a small sample of Omani secondary school teachers and principals' from four schools from the capital district.

Thirty-six teachers (i.e. N=9 teachers randomly selected from each of 4 secondary schools) and each of the principals (N=4) of those schools were asked to complete these surveys. The sample included both Omanis and expatriates. Using Cronbach's Alpha, inter-item reliability was determined for each factor. This established the degree of internal consistency of the Survey instruments.

The reliability estimates revealed that items for some of the factors had coefficients that were less than 0.80. Each of these items was studied individually and it was discovered that the negative format of some items created confusion among respondents because these items were difficult to rate on the survey's scale. These numbers corresponding to these items on the Principal Leadership Survey and teacher survey, were 2, 9, 20, and 30. On the Collaborative Culture Survey, the numbers corresponding to these items were 7, 11, 17 and 36 for teachers. It was decided to express these items as positive statements.

Other items on the Principal and teacher Leadership Survey that did not score highly in the reliability testing were subsequently revised. These numbers of these items, categorised by factors, were:

Leadership Factor	Items
Vision	3 and 8
Values	2, 11, 19, 34, and 36
Collaboration	42
Accountability	9, 10, 37, and 40
Relationships	20, 30, and 31
Improvement	35

Finally, language revisions were made on: 4, 5, 8, 12, 13, 14, 15, 16, 17, 25, and 38. After these revisions, a second pilot was conducted and reliability coefficients were recalculated. Table 5.1 indicates the reliability coefficients for each factor of the two survey

instruments in the pilot study for the teachers. For the Principal Leadership Survey, reliability coefficients ranged from a minimum of 0.81 for the sharing the vision to a maximum of 0.93 for building the relationship. On the Collaborative Culture Survey, the reliability coefficients ranged from a minimum of 0.67 for the developing values, to a maximum of 0.88 for seeking improvement.

The final survey contained a total of 42 items. Of these, seven items corresponded to each of the 6 factors. Items that corresponded to each leadership factor sub-scales were unique for each survey (i.e. the survey evaluating principals or the survey-evaluating teachers). The items, separated into factors, are listed in Table 5.2. See Appendix Two for copies of each of the surveys.

Table 5.1 Inter-item reliability coefficients for the Principal Leadership Survey (Teacher) and the Collaborative Culture Survey (Teacher)

Leadership Factor Reliability Coefficient (Cronbach's Alpha)		
	Principal Leadership Survey	Collaborative Culture Survey
Building Accountability	0.86	0.81
Developing Collaboration	0.86	0.86
Seeking Improvement	0.86	0.88
Building Relationships	0.93	0.83
Developing Values	0.89	0.67
Sharing Vision	0.81	0.83

Note: The other 3 forms of the survey were revised accordingly. Because of the small number of principals (N=4) who participated in the pilot, their surveys were not included in the reliability testing. On each survey, each of the 6 factors was measured over 7 items.

As stated previously, two versions of the survey were structured for principals. On the first version, the Principal Leadership Survey, phrased questions such that principals rated their own behaviours. In the second version for the principals, the Collaborative Culture Survey, contained the same items, but re-phrased, such that principals rated their teachers' behaviours. Similarly, two versions of the survey were modified for teachers. The Principal Leadership Survey and Collaborative Culture Survey. The two versions, that were created to evaluate perceptions of principals' behaviours differed only by the subject (depending on whether the respondent was a principal or a teacher). The same was true for the two versions created to evaluate the teachers.

Table 5.2 : Survey Items that corresponded to each leadership sub-scale

Leadership Factor Items Corresponding to Each Leadership Factor		
	Principal Leadership Survey	Collaborative Culture Survey
Building Accountability	5, 9, 10, 23, 33, 37, 40	6, 12, 13, 18, 19, 21, 33
Developing Collaboration	4, 7, 17, 21, 32, 39, 42	5, 9, 11, 17, 20, 24, 42
Seeking Improvement	13, 22, 24, 25, 28, 29, 35	1, 2, 10, 16, 23, 28, 39
Building Relationships	6, 16, 20, 27, 30, 31, 38	3, 4, 7, 14, 22, 32, 38
Developing Values	1, 2, 11, 18, 19, 34, 36	15, 25, 27, 29, 31, 35, 37
Sharing Vision	3, 8, 12, 14, 15, 25, 41	8, 26, 30, 34, 36, 40, 41

Respondents were asked to make qualitative judgements about themselves as well as other members of their schools using a five-point Likert-type scale. Alternative responses to the survey items were:

If he/she **Rarely or Never** does what is described in the statement, circle the letter A

If he/she does what is described **Once in a While**, circle the letter B

If he/she **sometimes** does what is described, circle the letter C

If he/she does what is described **Fairly Often**, circle the letter D

If he/she does what is described **Very Frequently or Always**, circle the letter E

In an attempt to reduce the need for reinterpretation of items on the respondent's part,

survey items were developed so that they would be specific to an educational context. Items were listed randomly on the survey in an attempt to reduce bias and response set, so as to improve the reliability of the responses. Finally, in addition to the leadership items, a small amount of demographic data was collected from each respondent.

Participants

The population of this study included all public secondary schools located in Oman that house students in a configuration of sequential grades within the secondary grade range. From a population of all Oman secondary schools, a total of 36 secondary schools were semi-randomly sampled[18]. From each of 9 educational districts in Oman, 4 secondary schools (2 with male students and 2 with female students) were selected by the researcher. The districts included in the study were: North Batinah, South Batinah, Dakhilia, Dhahira, Dhofar, Musandam, Muscat, South Sharqia, and North Sharqia. From each of the selected schools, the principal (N=1) and a semi-random sample of ten teachers (N=10) were asked to volunteer as participants in the study. Thus, a total of 36 principals (9 districts x 4 schools) and 360 teachers (9 districts x 4 schools x 10 teachers per school) were sampled. The participants who volunteered to participate in this study were informed that the overall information that they provided may be used for publication purposes, but individual information would be kept completely confidential.

Prior to sample selection, the researcher identified all teachers within each secondary school by their nationality (i.e. Omani or Non-Omani). They were also identified by the subject area/department that they each taught. Teachers were sampled according to their subject area in an attempt to get a representation of opinions across subject areas. Within these constraints, participants were selected randomly until the required number (N=10 per school) of teachers who consented to participate was obtained. The desired number of participants by subject area/departments was 4 teachers each from Oman language arts, mathematics, science, social studies, and English language arts.

Procedure

In this study, principals' leadership behaviours and teachers' collaborative behaviours are reviewed. The former are viewed as independent variable that may influence the development of a school culture the dependent variable that fosters collaborative practices among school members.

Each of these variables was measured twice. In separate surveys, principals and teachers rated their perceptions of the leadership behaviours of principals. In addition,

---

[18] School selection was initially restricted to achieve a sample of schools where 50% of schools educated male students and 50% of schools educated female students.

principals and teachers rated their perceptions of the collaborative culture among teachers.

Recruiting and Survey Administration

Permission was obtained from the Ministry of Education to conduct the study. Schools were selected and the teachers who were willing to participate in the study were categorised by their subject area. Subsequently, the principals of the selected schools were personally contacted by the researcher to explain that their school was selected for inclusion in the study. The principals were also notified that a semi-random sample of teachers from their school would be participating in the study. The principals were not aware of the teachers that participated in the study.

A letter was sent to the principals that explained the purpose of the study (see Appendix One for a copy of this letter). The letter also included an explanation of the procedure for administering the surveys, as well as a description of follow-up interviews that would be later conducted on a sub-sample of willing principals and teachers.

Designated representatives from local Colleges of Education delivered the survey materials to each of the participating schools. Materials included the survey forms, letters explaining the surveys, and directions for completing the surveys (see Appendix Two). Enough copies of the materials were provided so that each participant would be provided with one copy of their own for completion. There were minimal overall limitations placed on the survey administration procedure. The participants were each asked by the research associates to fill out all surveys at once in a non-distracting environment. It is important to note here that the principals did not administer the surveys, and thus could not have influenced their responses in any direct manner.

The designated representatives from Sohar Teacher College later collected the completed surveys. The surveys were placed in an envelope and returned to the researcher by hand.

Follow-up Interviews: Background

Literature reveals that combining interviews with other research methods, such as questionnaires and/or observations, can gain much more information related to the research topic (Patton, 1990; Robson, 1996). As discussed earlier, there is a significant gap in the literature addressing the reciprocal leadership behaviour. In this regard, the interview method was seen as essential tool to the present study. It was assumed that some accurate data and additional reliable information could be obtained more easily through interviews than it could be through the surveys. Since the implementation of the Reform in Oman is in its initial stages, and since the required data is not well elaborated in documents, it was necessary to get a more accurate perception/picture of the participants. Furthermore, as Best (1991) contends, the interview is often the exceptional form of data collection, as people are often more willing to talk than they are to write.

In addition to collecting information from the questionnaires, the present study sought qualitatively to elaborate the experiences of principals and teachers related to their contextually constructed role. Specifically, information was sought relating to how principals and teachers experience their roles within the reality of their respective positions. In particular, it was hoped that the results of the follow-up interviews might serve as an explanatory device for any relationships found in the analyses of the survey information.

Interview Development

The research methodology employed a phenomenologically based interview method, which allowed the participants to reconstruct their own observations and experiences. Interview items were prepared in advance by the researcher and were piloted in using two teachers and one principal in Oman. These pilot interviews were tape-recorded so that the general sequence of interview items could be later re-arranged according to the model of Robson (1996). This model prescribes that items be arranged according to introductory questions, warm up questions, main-body questions, cool down, and closing questions. In addition, methods of opening were determined from these pilot studies in order to facilitate the establishment of rapport and mutual co-operation in the interview. Results of the pilot study were also examined in order to estimate the clarity of the items, identify of the threatening items, and the length of the interviews.

Subsequent to the pilot interview study, revised interview items were translated into Arabic, the language used in the interviews. A bilingual (English/Arabic) speaker completed the translation in order to revise the clarity and suitability of the questions. Interviews were tape-recorded to preserve their completeness, which allowed for greatest accuracy when compiling the data, as well as subsequent technical analyses for the benefit of the researcher by allowing future interviews that can be improved upon. In addition to the tape recording, the interviewer took notes during and after each interview to keep a record of non-verbal cues as an additional reminder of that particular interview.

Interview Process

Once the surveys were processed and analysed, the researcher conducted the formal follow-up interviews on a random sub-sample of participants[19]. Nine principals and 18 teachers (one male and one female teacher in each secondary school) were randomly selected for the structured interviews. These structured interviews were conducted to obtain additional detailed information that could further provide specific information about and/or full explanations of specific behaviours of principals and teachers. The focus of the follow-up interviews was on specific examples or actions that relate to both the 6 factors identified

---

[19] All the participants were from the capital district.

by the survey instruments that foster and promote the development of a collaborative school culture, and items that are related to the implementation of the 20/20 Reform (see Appendix Three for copies of the follow-up interview questions). In addition, factors that resulted from the analyses of the completed questionnaires were also re-addressed during the interviews. This was done in order to further understand these responses and analyses.

Principals and teachers were asked separately to describe the actions evidenced by principals and teachers that exemplify these factors. These incidents were subsequently compared with leadership practices identified in the literature as significantly related to the establishment of a school culture that fosters collaboration among its principal and teachers. Principals were also asked to identify knowledge and/or skills that they believe contributed to the development of a collaborative culture. Both positive and negative comments were collected.

The aim of the in-depth interview was to obtain as much relevant information as possible from the respondant. Thus, strategies such as presenting questions in a non-judgmental form, and being respectful and sensitive toward the respondent (Robson, 1996) were used in the present study in an effort to minimise any bias on either the interviewer's or respondent's part. In addition, the interviewer was very sensitive to self-monitor his comments, actions and gestures, in an effort to establish a common rapport with the interviewees (Measor, 1985). Finally, all respondents were assured of confidentiality of their identity as well as their remarks, both in written form and when they met with the researcher for the interview.

Statistical Analyses

Two assumptions are made for the purpose of the present study. The first assumption is that the perceptions of leadership behaviour and collaborative practice behaviour can be identified and measured by survey techniques and instruments. The second assumption is that the respondents provided reliable and relatively accurate information. The present study seeks to both describe the current status of leadership in Oman secondary schools, as well to understand and analyse the principles underlying the structure of leadership in these schools. The design of the study was created with both aims in mind so that both qualitative and quantitative statistical approaches could be employed in understanding the data and in alluding to future areas of research.

Both qualitative as well as quantitative analyses were planned for the survey data. Demographic data from each sample were summarised using descriptive techniques and compared to the population of Omani Teachers. Parametric inferential techniques were applied only to assess differences in age and years in (teaching or administrative) positions. Non-parametric inferential analyses were used to compare the nationality composition of

respondents as well as their education.

The remaining (i.e. perceptions of leadership) survey information was reduced from the 42 original questions into the 6 leadership factors, each consisting of the 7 corresponding items (see Table 5.1). Original Likert-type data from surveys was digitally coded into ASCII text files and later imported into SPSS statistical software for analyses. Data were coded such that a response of 'Rarely or Never' was coded with the numerical value of 1; A response of 'Once in a while' was coded with a numerical value of 2; a response of 'Sometimes' was coded with a numerical value of 3; a response of 'Fairly Often' was coded with a numerical value of 4; and a response of 'Very Frequently or Always' was coded with a numerical value of 5.

Scores for each six factors, Vision, Values, Collaboration, Accountability, Relationships and Improvement was computed as the sum of the scores for each of the 7 items corresponding to each leadership factor. Thus, the possible values computed for each respondent/factor will range from 35 to 5. Thirty-five can be obtained if a respondent answers with a 5 on the scale of 0 to 5 for each of the 7 items. 5 would be obtained if a respondent answers with a 5 for each of the 7 items.

To address the first two research questions, total scores were also be computed for each Respondent. Mixed-model Multivariate Analysis of Variance was used to analyse all leadership factor scores across other variables to estimate any differences in perceptions separately for principals and teachers.

The third research question was addressed statistically by use of the Spearman rank-order correlation (roc) coefficient. A measure of association between teachers' perceptions of their own as well as their respective principals' leadership behaviour was computed. In addition, these coefficients were evaluated for significance.

The comments section at the end of each survey was itemised and summarised for the reader, and these are incorporated into the discussion in the following chapter (see Chapter Six; Results and Analyses). Chapter Six outlines the findings of these researches and alludes to the problems faced by school leaders, as the new curriculum will be introduced to Oman secondary schools. In addition, it draws attention to the possibilities of the implementation of the new curriculum poses for those principals and teachers who are vested to ensure efficacious implementation of the curriculum.

Data Collection

A letter from the Office of H.E. the Minister of Education was sent to the directors of the 9 Omani school districts. The letter explained the objectives of the study and requested that the principals and a sample of 10 teachers (from each subsequently selected school) be assembled at selected locations and times to fill out questionnaires.

Assessment of perceptions of leadership and collaborative culture were determined

using self-report 5-point Likert-type questionnaires (see Appendix Two for copies of each survey). The questions were designed to rate the approximate frequency of various behaviours as perceived by the respondent. On the scale, a score of 1 represented "rarely or never", and a score of 5 represented "very frequently or always". Both principals and teachers from each district were asked to fill out two questionnaires. One questionnaire rated the principals (leadership behaviour) and the other rated the teachers (collaborative culture). Both principals and teachers were asked to complete both the surveys. Thus, principals rated both themselves (i.e. their perceived leadership) as well as the teachers (i.e. the perceived collaborative culture). Teachers rated both themselves (i.e. their perceived collaborative culture) as well as the principals (i.e. the leadership of the principals). Thus there were 2 versions each of 2 surveys (i.e. a total of 4 surveys). The item wording for the surveys for rating principals (or teachers) essentially differed by subject (i.e. "I" was used in the principals' (or teachers') survey when principals (or teachers) rated themselves. "This principal" was substituted for this when the teachers rated the principals, and "The schools' teachers" was substituted when the principals rated the teachers). The wording of the remainder of each of the items did not differ across the surveys.

The completed questionnaires were collected and returned to the researcher and coded onto "mark-sense" Educational Testing Service sheets. Data from the coded forms was then entered into SPSS statistical software for analyses. To supplement the findings of the survey, follow-up interviews were conducted on randomly selected principals and teachers who completed the survey. (Appendix Three contains copies of the interview questions for both principals and teachers).

Specific statistical tests used for the subsequent analyses are indicated in appropriate portions of this chapter. All reported statistics are exact or were rounded to 2 decimal places (whichever was less). All reported probability values were rounded to 2 decimal places. And the null-hypothesis alpha was set at 0.05 or at 0.01 as appropriate.

Chapter Six

Results

Leadership and Collaboration in Secondary Schools

Background

The primary goal of this study is to indicate the extent to which the leadership structure in Omani secondary institutions needs to, and is changing to accommodate the new standards-based curriculum. This curriculum known as Standards-Based Curriculum, has been seen as the previous curriculum being quite radically different in the learning processes as well as in the content of the syllabus. There has been an awareness that the challenges facing Oman, particularly the need to cope with technological changes, have necessitated preparation of new teaching methods. The Omani pupil will be living in new circumstances created by new global economic conditions, which will require a high degree of technological adaptation and experience in science and mathematics. This will enable employment of rapidly developing technologies in accordance with to Oman's needs. Therefore science and mathematics curricula will be designed to provide knowledge and skills required by Oman's economy so that the individual will be able to adapt himself/herself to future needs and conditions. As discussed in previous chapters, a change in the leadership structure of these institutions is central to the curriculum revisions that are outlined in the Reform initiative.

The strategy for leadership refers to the preparedness of educational leaders to be able to exert moral leadership. This will require strong human relations among the members of the school work force team. Human relations are not exchanges of mere complimentary expressions but the term implies actual understanding of incentives and motivations of individuals that encourage them to master their work. School administrators therefore should endeavour to recognise opportunities for progress and support for programme implementation and feedback.

The demand for a change in leadership occurs as Oman moves from a hierarchically-based top-down diffusion of information with guidelines from the Ministry of Education, to a more dynamic, productive, collaborative and responsible effort within the individual schools themselves. Successful realisation of the Reform requires that the schools perceive a greater responsibility for continuously identify and improve with innovation of the shortfalls. Thus, (as noted in Chapter Five), this study was undertaken to assess the perceived structure of leadership within schools to address three fundamental questions:

1. To what extent do the perceived leadership traits of *principals* foster a collaborative

culture?

2. To what extent do the perceived leadership traits of *teachers* foster a collaborative culture?
3. What if any, relationships are there between the leadership traits of principals and teachers as perceived by the teachers?

To address these questions, this study used a survey technique utilising Likert-type items. In addition, follow-up, in depth interviews were conducted after the surveys were administered. To explore different facets of leadership qualities, survey items were designed to measure six distinct sub-scales (delineated in chapter four and discussed at length in Chapter Five). These six factors are: developing values, sharing vision, developing collaboration, building accountability, building relationships, and seeking improvement.

This chapter is divided into three parts. Part One delineates the population sample and the reliability analysis. Part Two will report on the four survey items which are:

1. Principal Leadership Survey (P.L.S.) – self
2. Collaborative Culture Survey (C.C.S.) – principal
3. Principal Leadership Survey (P.L.S.) – teacher
4. Collaborative Culture Survey (C.C.S.) – teacher.

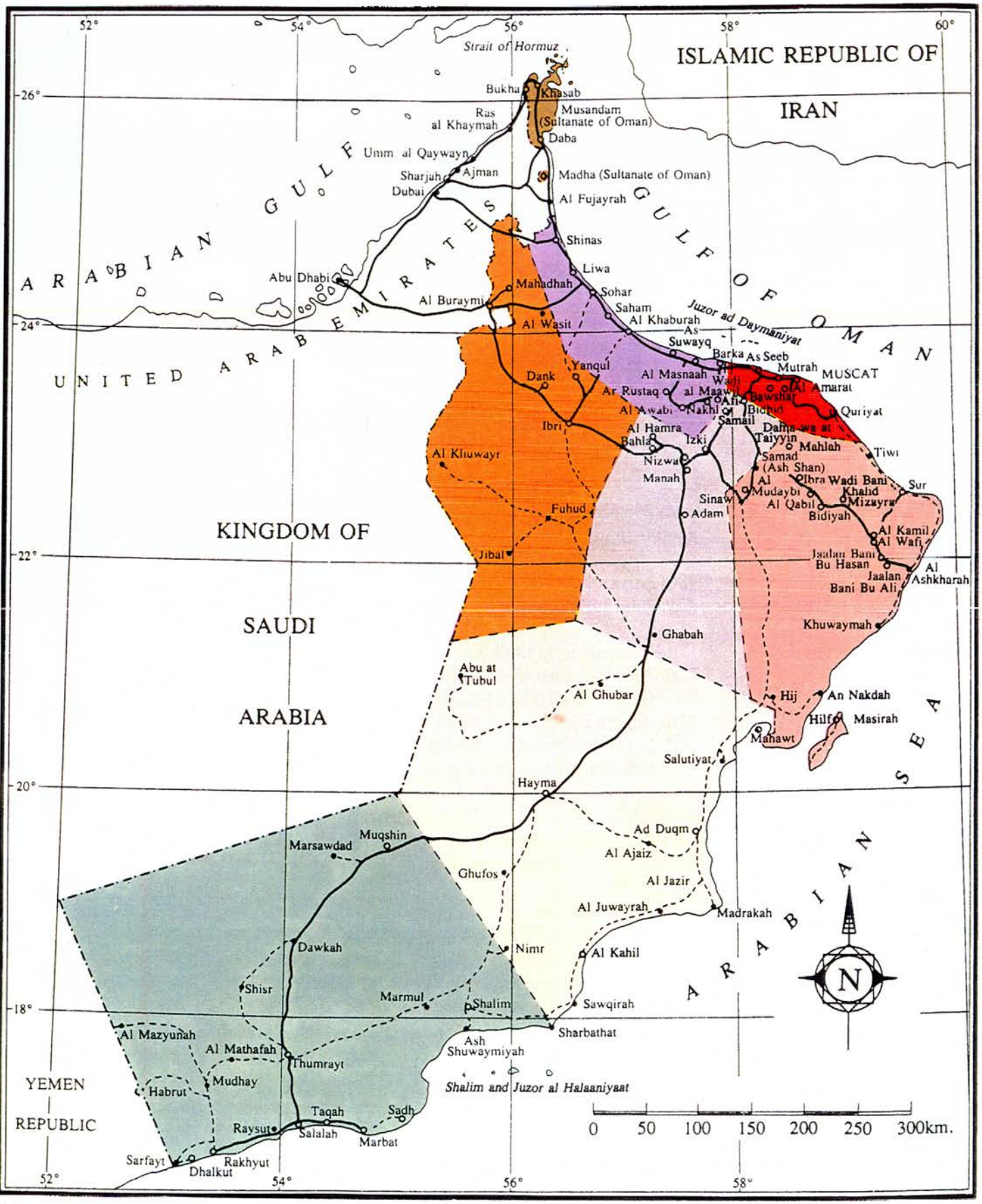
Part Three addresses the three main fundamental research questions which have been mentioned above. This will be followed by conclusions and comments.

Part One: Population and Sampling

Population

The population defined for the purposes of this study includes principals and teachers from Omani public secondary schools. This includes 9 of the 10 educational districts. (See the Map of Oman on the following page). These districts comprised of 177 schools. Of these schools, 84 schools are for males, 88 are for females, and 5 schools are coeducational. There are a total of 5428 teachers. The gender of the population of teachers in Oman is evenly divided (approximately 49% are males; and 51% are females).

SULTANATE OF OMAN



Produced by the Ministry of Information, September 1994

Based on National Survey Authority OR 1, edition 6 dated June 1994

This map is not an authority on international boundaries

- Wilayat
- Village / Town
- Graded Road
- Metalled Road
- International Boundary

Currently, approximately 24% of the teachers are Omani, and the remaining 76% are expatriates[20]. By subject area, 32% teach the Sciences[21], 65% teach the Arts[22].

Because of its size, the smallest district (Wusta) was not included in this study. From each of the 9 remaining districts, 4 secondary schools (2 male and 2 female) were randomly selected[23]. Thus the entire sample came from 36 secondary schools. From each school, the principal and 10 selected teachers (i.e., 11 individuals) were asked to fill out either the principals' or the teachers' surveys, as appropriate. The selection of teachers was not random in that the sample was stratified to include a cross-section of subject areas (Arts and Sciences) taught by the teachers. Within the stratification, teachers who agreed to participate in the study were randomly selected.

The final sample included surveys from 351[24] teachers and 36 principals. The number of responses for teachers, however, was not consistent. Table 6.1 indicates response rates by teachers for each district.

Table 6.1 Number of surveys returned by teachers from each school

District	Gender				Total	Response Rate (%)
	Males (N=175)		Females (N=176)			
	School 1	School 2	School 3	School 4		
D1	10	10	10	10	40	100
D2	9	9	10	10	38	95
D3	8	10	10	10	38	95
D4	10	10	10	10	40	100
D5	10	10	9	10	39	97.5
D6	10	10	10	10	40	100
D7	10	10	9	10	39	97.5
D8	10	10	10	10	40	100
D9	9	10	9	9	37	92.5
TOTAL	86	89	87	89	351	97.5

Prior to the data analyses, survey responses for each participant were checked for

---

[20]Nationally, 64. % of teachers across grade level are Omani, 35. % of teachers are expatriates.

[21]The Sciences include Mathematics, Physics, Chemistry, and Biology.

[22]The Arts include Islamic Education, Arabic Language, English Language, History, Geography, Art Education and Social Education.

[23]Coeducational institutions constituted less than 3% of secondary institutions in Oman, and were not included in the sample.

[24]Only 350 teachers' data were used for subsequent analyses.

completeness. Several participants failed to answer at least 1 survey item. An *a priori* deletion criteria of greater than 10 non-consecutively ordered missing items per survey was used to omit all responses for that survey. On occasions, responses to all items on an entire page of the survey were missing. While these did not exceed a total of 10 items, since they were on the same page they were regarded as accidental omissions. Where there were 10 or less survey response omissions[25], mean values for the variable(s) in question were substituted.

The process of substitution was different for principals than for teachers. For teachers, mean values were computed for all teachers within a particular school. When a teacher was missing a response, the mean value for that particular item was computed using the remaining teachers in that school, and the mean was substituted for the missing value.

Since each school had only one principal, this particular substitution procedure was not possible for principals' data. Instead, when a principal had a missing a value to a survey item, the mean value of that item was computed using all principals' data, and that value was substituted.

Sample of Principals

All schools (100% response rate) returned principal surveys. It was not necessary to omit any surveys completed by principals. Table 6.2 includes the demographic data for all respondents categorised by role (teacher or principal) and gender.

The sample of principals reflected the population[26] in gender (50% males; 50% females), and composition (50% male schools, 50% female schools), but differed in nationality (see Table 6.2). One-third of the sampled principals indicated that they were of non-Omani nationality. Unlike the general population of teachers, over half of the principals sampled (approximately 55%) were Omani. A small proportion (4 principals; 11%) did not indicate their nationality.

No statistical differences were found across the gender of principals in their age, nationality, number of years of education, number of years as principal in the present school,

---

[25] Mean value substitutions were computed for responses to Principal Leadership and/or Collaborative Culture survey items only. There were no substitutions for demographic data.

[26] The population referred to is the population of teachers. There were no data available regarding the population of principals demographic characteristics, and therefore comparisons are difficult to interpret.

or the total number of years in an administrative position. Thus, regardless of gender, the sample of principals did not differ on any of the demographic characteristics measured.

Analyses were also conducted to compare demographic information across nationality. Principals did not differ across nationality by either gender, number of years of education (see Figure 6.1 for the distribution of educational level), or number of years experience in their respective schools. Non-Omani principals, however, were older than their Omani colleagues. Finally, non-Omani principals had a corresponding greater number of years of experience in administration compared to Omani principals. Thus, comparison of demographic characteristics of principals over their nationality revealed no differences except that the sample of Non-Omani principals was older and have been working in administrative positions longer than Omani principals.

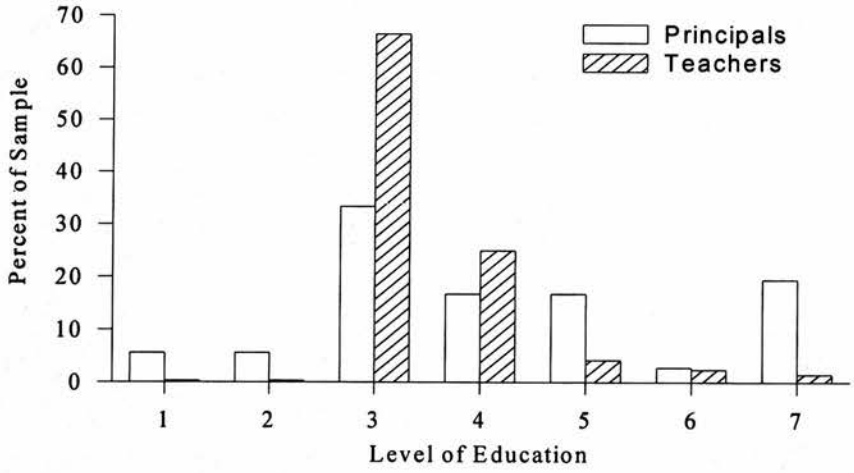
Sample of Teachers

As for the sample of principals, the sample of teachers reflected the overall population in gender (50% males; 50% females) and school composition (50% male schools, 50% female schools). Also similar to the principals, the teachers differed from the population in nationality. There was about the same number of Omani teachers sampled (approximately 47%) as non-Omani teachers sampled (approximately 46%). Approximately 7% of teachers, however, did not indicate their nationality. By subject area, the sample of teachers also reflected the population. The sample included 209 teachers of the Arts (approximately 60%) and 122 teachers of the Sciences (approximately 35%). Nineteen teachers (approximately 5%) did not indicate their subject area.

Table 6.2 Demographic statistics for respondents (N=350 teachers; N=36 Principals)

Teachers	**Females (N=176)**		**Males (N=174)**	
-	N	Mean ± (SD)	N	Mean ± (SD)
Nationality	-	-	-	-
Omani	114	-	51	-
Expatriates	41	-	119	-
Did not indicate	21	-	4	-
Age	150	29.6 ± (6.4)	164	37.2 ± (9.0)
Education level	159	3.2 ± 0(.6)	174	3.6 ± 0(9)
Subject Area	-	-	-	-
Arts	99	-	110	-
Sciences	58	-	64	-
Did not indicate	19	-	0	-
Years in current school	157	3.1 ± (2.4)	170	3.5 ± (3.4)
Total years in position	159	7.2 ± (5.5)	173	13.3 ± (8.2)
Principals	**Females (N=18)**		**Males (N=18)**	
-	N	Mean ± (SD)	N	Mean ± (SD)
Nationality	-	-	-	-
Omani	11	-	8	-
Expatriates	4	-	9	-
Did not indicate	3	-	1	-
Age	17	38.0 ± (10.0)	18	44.0 ± (10.9)
Education level	18	4.5 ± (1.9)	18	3.8 ± (1.6)
Years in current school	18	3.7 ± (3.3)	18	4.3 ± (6.2)
Total years in position	18	9.8 ± (8.6)	18	14.8 ± (11.5)

Note. Education was measured on an ordinal scale. Scores corresponded to the following levels of education: 1- Teacher training institute diploma 2- Intermediate college for teacher training diploma 3- Bachelor's degree in education 4- Bachelor's degree other than education 5- General diploma in education 6- Master's degree in education 7- Administrative certificate program.



Education Level Codes:
1 - Teacher Training Institute Diploma
2 - Intermediate College Diploma
3 - Bachelor's Degree in Education
4 - Bachelor's Degree other than Education
5 - General Diploma in Education
6 - Master's Degree in Education
7 - Administrative Certificate

Figure 1. Level of Education by Role

Figure 6.1 Percentage of Sample by Education Level of the Teachers.

While the number of teachers was consistent across gender, gender was not consistent across nationality. The percentage of teachers that was Omani and female (33%) exceeded the percentage that was Omani and male (15%). Conversely, there was a lower percentage of female expatriates (12%) than there was of male expatriate teachers (34%). Thus, the male teachers better represented the population according to their nationality than did the female teachers.

Analyses were conducted to compare teachers demographic information across gender. Results of these analyses indicated a number of differences between male and female teachers (see Table 6.2). The nationality of male teachers (noted above) differed from female teachers. Male teachers also had more education than their female counterparts. In addition, male teachers (mean age = 37 years) were older than female teachers (mean age = 29 years) and correspondingly, males had been teachers longer (mean =13 years) than females (mean = 7 years). Both male and female teachers, however, had been teaching in their respective schools for the same number of years (mean = 3 years).

The same analyses were used to compare demographic information of teachers over nationality. Results of these analyses revealed that teachers differed on all variables by their nationality. Non-Omani teachers had more education, were older, were teaching longer in their respective schools, and overall were teaching a greater number of years. Table 6.3 illustrates the values of these variables by teacher nationality.

Table 6.3 Mean ±(SD) of teacher demographic variables by nationality*.

Variables	**Nationality**	
	Non –Omani	**Omani**
Number who indicated nationality	**N = 160**	**N = 165**
Level of Education	**3.5 ±**	**3.0 ±**
Age (years)	**40.3 ±(6.9)**	**26.7 ±(3.5)**
Years teaching in current school	**4.1 ±(3.5)**	**2.6 ±(2.1)**
Total years teaching	**16.1 ±(6.4)**	**4.8 ±(3.2)**

*The typical level of education of the population of secondary teachers in Oman is at least a Bachelor's degree.

Reliability Analyses

Principals' and Teachers' responses to items from the Principal Leadership and the Collaborative Culture surveys were analysed for reliability using Cronbach's Alpha (Tabachnick & Fidel, 1996), which determines the average covariance among the various items[27]. For each survey, analyses were conducted on total scores as well as separately for items comprising each of the 6 sub-scales (as noted in this chapter). There was a particular interest in the consistency of responses within the sub-scale items, since the sub-scales formed factors for subsequent analyses. A list of each scale and reliability co-efficients is presented in Table 6.4

Table 6.4 *Reliability for Coefficients Principal Leadership and Collaborative*

Scales	Principal's Responses	Teacher's Responses
Principal Leadership	**N=36**	**N=348**
Total	**0.92**	**0.97**
Accountability	**0.66**	**0.81**
Collaboration	**0.61**	**0.86**
Improvement	**0.74**	**0.81**
Relationship	**0.61**	**0.81**
Values	**0.61**	**0.81**
Vision	**0.73**	**0.86**
Collaborative Culture	**N=36**	**N=344**
Total	**0.94**	**0.94**
Accountability	**0.73**	**0.64**
Collaboration	**0.73**	**0.75**
Improvement	**0.70**	**0.70**
Relationship	**0.71**	**0.69**
Values	**0.73**	**0.76**
Vision	**0.77**	**0.81**

Results of the reliability analyses for principals indicated that while overall

---

[27]Average covariance is computed using Cronbach's Alpha reliability model when items are not standardised (i.e., when items do not have a standard deviation of 1). When items are standardised, Cronbach's Alpha determines the average correlation among them.

reliability on total sub-scales was high, none of the sub-scales achieved the minimum desired reliability[28]. It is possible that for principals, the sample size was insufficient for an accurate estimate of reliability. However, principals' responses appeared to be more consistent when they rated the teachers than when they rated themselves (see Table 6.4).

Results of the reliability analyses for teachers indicated that, as for principals, the overall reliability coefficients for the total sub-scales were high (see Table 6.4). In addition, teachers' consistency of rating their principals was above the desired value of on all sub-scales. The consistency in rating their perceptions of their own behaviour, however, was lower in all cases when compared to their ratings of their respective principals. As for the principals' reliability coefficients, these self-assessment values were below in all cases, with the exception of the vision sub-scale. Thus, similar to their principals, teachers appeared to be more consistent when they rated others (i.e., the principals) than they were when they rated their perceptions of their own behaviour. This may have an important implication for the manner in which curriculum reform is introduced into schools. It may become crucial to bring on board the principals' perceptions of teachers as "hard working" and "doing a good job".

Part Two: Perceptions of Leadership and Collaborative Culture

Principals

Survey Item 1: Principals' Self-Perception of Leadership Behaviour

The principals' responses to the Principal Leadership survey reflected their assessment of their own leadership behaviour. Table 6.5 illustrates mean values of the six leadership factors for principals. Since there are 7 survey items that correspond to each factor, and the highest rank that can be assigned to each item has a value of 5 (corresponding to "Very Frequently" or "Always"), the maximum number of points that can be ascribed to any factor is 35 (or 5(rank) x 7(items)). The total of all factors (depicted in the bottom row of Table 6.1) represents the mean sum of the Principal Leadership survey. Since the total number of items on the Principal Leadership survey is 42, and the highest rank that can be assigned to each item has a value of 5 (corresponding to "Very Frequently" or "Always"), the maximum number of points that can be ascribed to the total of items for Principal Leadership is 210 (or 5(rank) x 42(items)). These maximum mean totals apply to both the

---

[28]In general, a reliability coefficient of at least .80 is desired and considered to indicate consistent responding.

Principal Leadership and Collaborative Culture surveys.

Table 6.5 Mean (±SD) of principals' self-perceptions by leadership factors.

Factors	Nationality				
	Omani		Non-Omani		Combined
	Male	Female	Male	Female	(N=32)[1]
Accountability	30.6 (3.4)	31.1 (2.8)	30.2 (2.9)	33.5 (1.9)	31.1 (2.9)
Collaboration	31.1 (1.9)	31.4 (3.0)	31.8 (1.5)	33.2 (2.2)	31.7 (2.2)
Improvement	27.8 (3.8)	28.8 (3.7)	29.2 (3.4)	29.7 (3.3)	28.8 (3.5)
Relationship	30.0 (1.7)	32.2 (1.9)	32.1 (2.4)	33.0 (2.1)	31.7 (2.1)
Values	28.8 (2.6)	31.0 (2.4)	30.6 (3.9)	32.0 (3.5)	30.5 (3.0)
Vision	29.2 (3.6)	29.6 (3.7)	30.0 (3.1)	33.7 (1.8)	30.0 (3.6)
TOTAL	177.7 (14.8)	184.3 (13.6)	184.0 (14.9)	195.2 (14.3)	183.9 (14.5)

Note: 1 male and 3 female principals did not indicate their nationality.

In order to determine if the responses to the Principal Leadership survey items differed by gender and/or nationality, a Two-Way (gender by nationality) Multivariate Analysis of Variance (MANOVA) was conducted on the 6 leadership factors. Results indicated that the principals' ratings of themselves did not differ by their gender or their nationality. In addition, the analysis did not reveal a gender by nationality interaction. Thus, regardless of their gender or nationality, principals' ratings of their own leadership behaviour was the same. In light of this finding, there appear to be some possibilities for complementarity in the implementation of the Reform at least as regards the principals' self-perceptions.

Since there were no interaction or main effects of gender or nationality on the 6 leadership factors in the principals' ratings of their own leadership, a final analysis was conducted on the scores that were combined across these two variables (i.e., values in the last column of Table 6.5). A One-Way ANOVA was used to test the hypothesis that the principals rated themselves equally across all 6 factors. Results of this analysis indicated that the principals did not equally rank their perceptions across the 6 factors. The mean ratings of the principals' assessment of their own leadership across the six factors are illustrated in Figure 6.2.

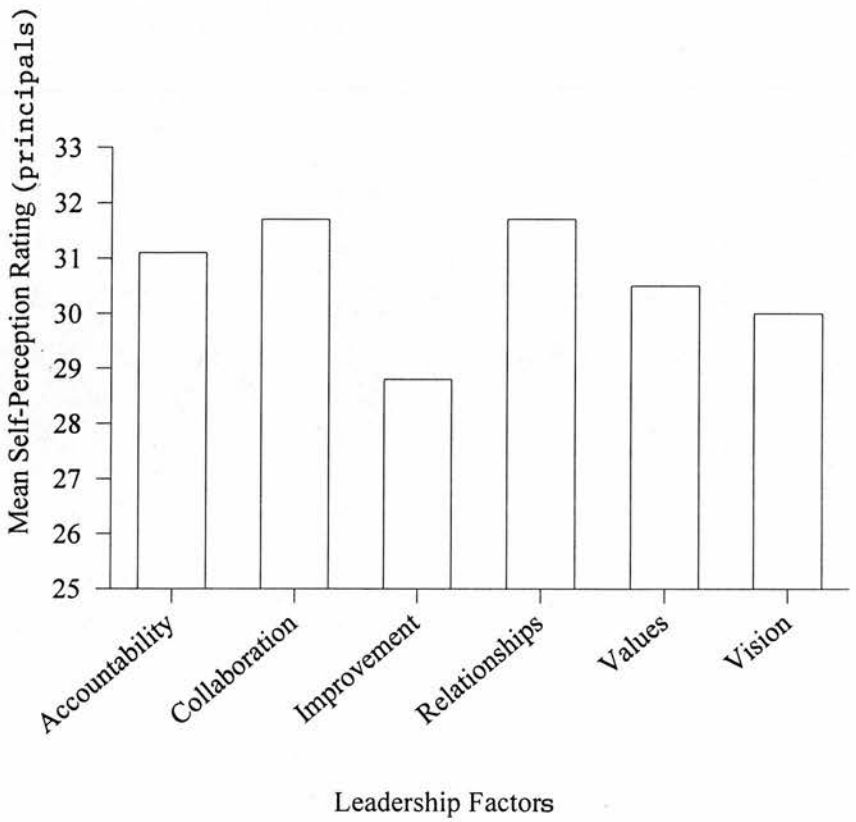


Figure 6.2 Mean ratings of principals' self-perceptions of leadership.

In order to determine how the factor ratings differed, post-hoc comparisons were conducted using the Tukeys Honestly Significant Difference (HSD) Test (Tukey 1977). Results of these comparisons demonstrated that principals rated their self-perceptions of seeking improvement lower than all other factors except sharing vision. In addition, their self-perceptions of sharing vision were rated lower than their self-perceptions of developing collaboration and building relationships. No other comparisons of their self-ratings differed.

This first survey item in the study refers to the extent to which the current self-perceptions of principals' leadership behaviour indeed fosters a collaborative culture within Omani secondary schools. This culture may be seen to strengthen the abilities of the individual schools to realise the changes to be made according to the Reform. Several researchers (e.g., Bass, 1981; Burns, 1978; Covey, 1990; Greenfield, 1987; Razik 1996; Sergiovanni, 1994) maintain that structured organisations must share moral convictions in order to effect and achieve significant changes within them.

The sample of principals reported that they believe the leadership behaviours measured in the current survey were demonstrated by them at least 'fairly often' (see Figure 6.2). These perceptions did not differ by either their nationality or their gender. Overall, however, their self-perceptions of seeking improvement and sharing vision were lower than at least two other factors.

Seeking improvement was rated lower than all other factors except sharing vision (ratings for seeking improvement and sharing vision did not differ). Sharing vision was rated lower than both developing collaboration and building relationships. While the remaining factors did not differ from each other, sharing vision is a component necessary for organisations to achieve change. These findings would suggest that principals do not have a strong commitment to the Reform policies, or at the very least, lack an ideal level of values, imagination or insight for effective leadership of any kind. Still, the principals' self report of their sharing vision would indicate that they at least minimally have provided sufficient clarity about the goals to be achieved by the Reform, and no principals reported in their comments that they perceived these goals to be unclear or lacking. Thus, from the current data, while self-rating on this particular factor was lowest, it does not appear to be so low as to substantially hinder the Reform process in any manner. In fact, since the principals' average ratings of their own leadership behaviour was at least 4.0 on all factors, it is arguable that they at least perceive themselves as being facilitive on all measured accounts.

The second survey item addresses the extent to which the perceived leadership of teachers fosters a collaborative culture. What is perhaps most notable from the principals' perceptions of the teachers' collaborative culture, was that the pattern of ratings that the principals reported for teachers resembled the pattern that they reported for themselves (see Figures 6.2 and 6.3). Nevertheless, principals' self-ratings of leadership behaviours appeared to be greater than their ratings of teachers across all factors. To test whether principals rated themselves higher, scores for principals' ratings were compared using the t-test for independent samples. The analyses indicated that principals' self-ratings were indeed greater across all factors.

It may not be surprising that principals rated themselves higher on all factors, although there is more than one explanation for this. Principals may indeed believe that they exhibit these behaviours more frequently than their respective teachers do. However, the differences in the scores may be an artifact of response bias, and it is also possible that principals simply have greater knowledge of the indicated examples of their own behaviours than they have of the teachers', and therefore can rate themselves as exhibiting these behaviours with greater frequency. Still, the lowest rating that principals gave teachers was for seeking improvement. This score may seem low in both absolute and relative terms, however it is closer to the rank of observing these behaviours 'fairly often' (i.e., a rating of 4) rather than 'sometimes'. Thus, we do not argue that this score should be viewed in any negative manner, especially considering that principals' didn't really offer any specific criticisms of their teachers in their comments following the surveys.

In summary, despite the fact that principals rated themselves higher on all factors, it does not appear that principals perceive that the teachers' collaborative culture is unfavourable to successful Reform efforts and/or leadership changes. In fact, these scores seem to suggest that principals believe that the atmosphere among their respective teachers is suitable for these changes to occur.

Survey Item 2: Principals' Interpretation of Collaborative Culture Among Teachers

The principals' responses to the Collaborative Culture survey reflected their assessment of the leadership of the teachers at their respective schools. Table 6.6 illustrates the mean values of these six leadership factors.

Table 6.6 Mean (±SD) of principals' assessment of teachers by leadership factors.

Factor	Nationality				
	Omani		Non-Omani		Combined
	Male (N=9)	Female (N=11)	Male (N=8)	Female (N=4)	(N=32)
Accountability	28.1 (3.7)	28.5 (3.1)	28.8 (3.8)	30.2 (3.4)	28.7 (3.3)
Collaboration	27.1 (2.6)	27.0 (3.9)	27.0 (4.2)	30.1 (3.7)	27.4 (3.5)
Improvement	24.8 (2.1)	27.4 (3.7)	27.1 (3.9)	29.2 (4.1)	26.9 (3.5)
Relationship	26.8 (2.0)	28.3 (3.6)	29.6 (3.9)	30.5 (4.4)	28.5 (3.4)
Values	27.8 (3.1)	28.2 (3.0)	28.6 (2.9)	30.2 (4.5)	28.5 (3.0)
Vision	26.6 (2.8)	27.2 (4.1)	27.0 (4.1)	30.0 (5.1)	27.3 (3.7)
TOTAL	161.6 (12.9)	166.9 (18.9)	168.2 (20.4)	180.4 (24.4)	167.5 (17.9)

Note. One male and 3 female principals did not indicate their nationality.

In order to determine if the principals' responses to the Collaborative Culture survey items differed by the principals' gender or nationality, a Two-Way (gender and nationality) ANOVA was conducted on the six factors. Results indicated that the principals' ratings of teachers showed no main effects of either gender or nationality. Further, there was no gender by nationality interaction. Thus, regardless of the principals' gender or their nationality, they rated the teachers' leadership behaviours the same.

As with the data for principals self-perceptions of leadership, responses were combined across gender and nationality (i.e. scores in the last column of Table 6.6) and analysed using One-Way ANOVA to test the hypothesis that the principals rated the teachers equally on all factors. Results of this analysis indicated that the principals did not equally rate the teachers across the six factors. These data are illustrated in Figure 6.3

In order to determine which factors were different from each other, means were compared using the Tukey's HSD test. Results of these comparisons demonstrated that principals' rating of teachers' seeking improvement was lower than the ratings of their building accountability, building relationships, and developing values. In addition, the principals' rating of teachers' developing collaboration and sharing vision were rated lower than their building accountability. No other comparisons of the principals' ratings of their respective teachers differed.

This being the case, one might note that for transformative leadership, principals will have to be asked to develop further accountability with their teachers, further interpersonal relationship and encourage values.

All respondents were asked to make any general comments regarding the survey and/or comments specific to their school's current efforts toward the Reform. These were summarised and categorised and are presented. In appendix A, total of twenty-three principals offered comments at the conclusion of their surveys. These comments are summarised in (Table 6.7) the most common observations by principals were generally positive critiques of the study and/or the questionnaire, and that their schools lacked a School Curriculum Committee referred to in some of the survey items. The remaining comments were greater in variety, but were offered by relatively fewer principals. These were largely specific to their respective schools' efforts toward the Reform, or made suggestions for the Reform.

Regarding the principals' comments relating to schools' efforts toward Reform, it is unclear how these changes have been implemented with respect to whether they were initiated by the Ministry or the schools' staff. Still, these comments were derived from a total of 5 principals and present encouraging preliminary efforts.

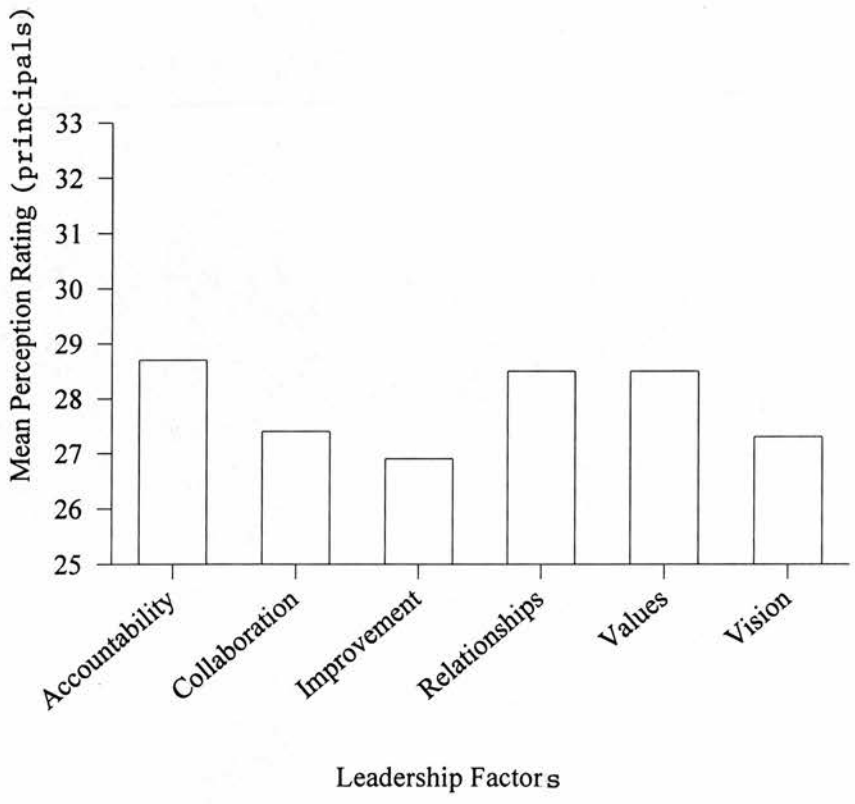


Figure 6.3 Mean ratings of principals' perceptions of collaborative culture among teachers.

Although few principals made comments relating to specific suggestions for the Reform, these comments included suggestions for enhancing the school with respect to principals as well as teachers and students. One principal refers to his power as "finite"[29], where he has indicated that principals deserve more respect and should have more responsibility[30]. It is difficult to determine from these comments alone whether this comment in particular refers to his perception of power as a figure under the Ministry, above the teachers, or both. Interestingly, this same principal made one comment relating to the training of teachers. This makes one suspect that the perception of "finite power" is perceived by the principal as being under the Ministry. Otherwise he might feel compelled to initiate such objectives by himself, rather than waiting for the directive from the Ministry. On the other hand, perceived finite power as a figure under the Ministry might perpetuate perceived finite power as a figure above the staff and students, as at least one principal appears somewhat discouraged that students are not held to rigid behavioural standards and expectations.

---

[29]Refer to Chapter 1 for a discussion of perceptions of finite/infinite power.

[30]Both of these comments were made by the same principal.

Table 6.7. Principals' Comments and Suggestions Regarding Survey and Reform

Note. Some principals made more than one comment.

Number of Principals Comment	
	General Comments
5	Positive comments of study and/or questionnaire
5	No School Curriculum Committee
1	Did not include other relevant non-teaching staff (e.g. librarians) in sample
1	Many survey items were ambiguous
1	Outstanding teachers should be recognised for their efforts[a]
	Comments relating to schools' efforts toward Reform
1	Positive teacher enhancement programs have been initiated
1	Workshops have been conducted to draft education objectives and teaching methods
1	We have issued literature on modern methods of teaching
1	Observation of teachers has been adopted to assist them in development of their
1	Workshops on self-learning methods have been conducted
1	Teachers analyse/criticise their subject's curriculum by subject group
1	We have exchange [visiting] teacher programs
1	Our school does much of what is included in the questionnaire to prepare for the
1	We have implemented intensified student lessons once per week
1	Programs to reward outstanding students have been implemented
1	Principals should have more respect as school leaders
1	Principals should be involved in the selection of expatriate teachers
1	Modern teaching methods should be implemented
1	Special training for new teachers is necessary
1	Specialised administrative and social groups should be increased in large schools
1	Self-learning workshops should be provided to students
1	Students need to be more informed of school laws and policies
1	Students' attendance should be more closely monitored
1	Stricter enforcement of laws is needed

[a]This comment did not specifically relate to the Reform either as a suggestion or regarding the school's efforts toward the Reform.

Teachers

Each district sampled had a minimum return rate of 90%, with eight of the nine districts returning at least 95% of their surveys (see Table 6.2). An inspection of the data revealed that a single teacher failed to complete more than 10 non-consecutive items from both the principal leadership data and the collaborative culture survey. Thus, data from this

respondent was omitted from all analyses. Further, 6 more teachers failed to complete more than 10 non-consecutive items from the collaborative culture survey, and 2 additional teachers failed to complete more than 10 non-consecutive items from the principal leadership survey.

Data from the 8 teachers who had information from one survey missing were still used for demographic analyses. When analyses were conducted on reliability co-efficient determination or the survey responses themselves, only the information from the completed survey information was used. Data from the remaining (i.e., complete) surveys were used for all analyses of teacher respondents. Thus, the total number of teachers possible for any given analysis was N=350. If, however, the analyses were restricted to the principal leadership survey, the total number of teachers included was 348. If the analyses were restricted to the collaborative culture survey, the total number of teachers included was 344. Table 2 includes the demographic data for all respondents (N = 350) categorised by role (teacher or principal) and gender.

Survey Item 3: Teachers' Interpretation of Principal Leadership

The teachers' responses to the Principal Leadership survey reflected their assessment of the leadership behaviour of the principals in their respective schools. The mean values of the six leadership factors categorised by district, gender, and nationality are illustrated in Appendix Five). As for the principals' data, the maximum number of points that can be ascribed to any single factor is 35. The maximum value that can be ascribed to the total of all factors is 210.

Initial analyses were conducted to determine if the teachers' perceptions of principal leadership differed by gender and/or nationality. A three-way (gender by nationality by factor) ANOVA was conducted on the 6 leadership factors. Results of this analysis are depicted in Appendix Five. Although the 3 factors did not interact, total scores for the factors of Principal Leadership were not the same across either gender or nationality (see Appendix Five.

Effects of Gender on Principal Leadership Factors

In order to test the effects of gender of teachers on their perceptions of principal leadership, a One-Way ANOVA was conducted at each level of gender. Results of these analyses showed that neither male nor female teachers' perceptions of Principal Leadership were equal across the six factors. Mean values for the 6 Principal leadership factors, combined over nationality, are presented in Table 6.8.

Tukey's HSD Tests were conducted over factors for each gender in order to determine which leadership score(s) differed for males and females. Results, illustrated in

Figure 6.4, showed that male teachers rated seeking improvement by their principals lower than all other factors of leadership.

Table 6.8. Mean (±SD) of Principal Leadership scores by factors and gender for teachers.

Factors	Gender		Total
	Male (N=173)	Female (N=175)	N = 348
Accountability	28.7 (4.2)	27.0 (5.1)	27.8 (4.7)
Collaboration	29.2 (4.4)	26.7 (5.6)	27.9 (5.2)
Improvement	26.7 (4.8)	24.9 (5.1)	25.8 (5.0)
Relationships	29.2 (4.0)	27.1 (4.7)	28.1 (4.5)
Values	29.3 (4.1)	26.6 (4.9)	27.9 (4.7)
Vision	27.5 (5.1)	25.1 (5.8)	26.3 (5.6)
Total	170.7 (24.3)	157.7 (29.0)	164.2 (27.5)

In addition, sharing vision was rated lower than all other factors (except seeking improvement). Scores for the other factors did not differ from each other. Results were similar for female teachers. For females, ratings of their principals' seeking improvement and sharing vision did not differ from each other but, as did males, female teachers rated their principals lower on both of these factors than they did on all other factors. Scores on the other factors did not differ from each other. Finally, as is suggested by the factor means in Figure 6.4 and Appendix Five, male teachers rated their respective principals higher than did female teachers on all factors.

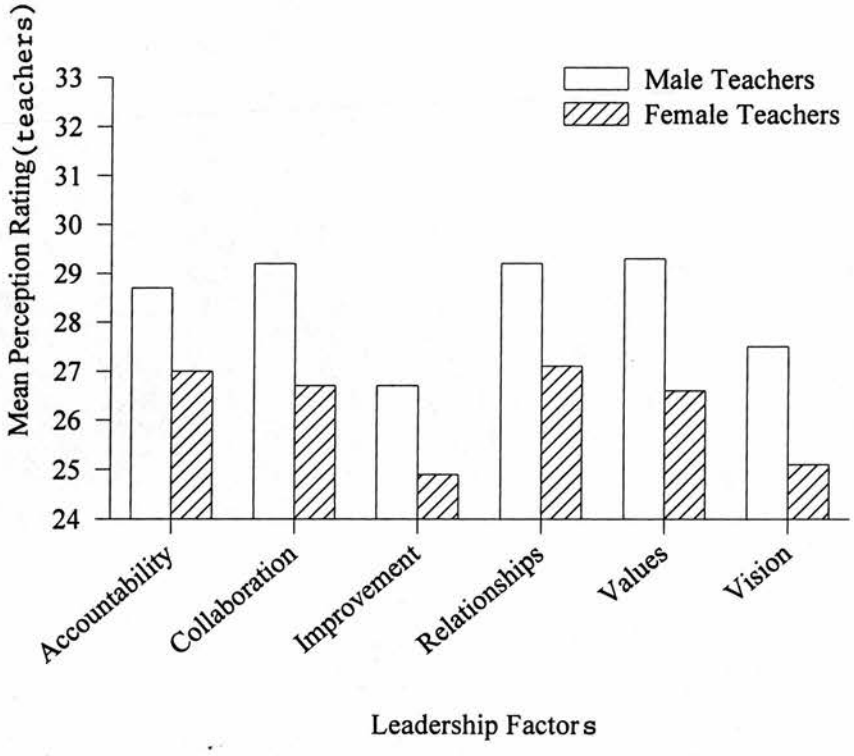


Figure 6.4 Mean ratings of teachers' perceptions of principal Leadership by teacher's gender.

Effects of Nationality on Principal Leadership Factors

In order to test the effects of nationality of teachers on their perceptions of principal leadership, a One-Way ANOVA was conducted at each level of nationality. Results of these analyses showed that neither Omani teachers' nor their expatriate colleagues' perceptions of Principal Leadership were equal across the 6 factors. Mean values for the 6 Principal Leadership factors, collapsed over gender, are presented in Table 6.9.

Table 6.9 Mean (±SD) of Principal Leadership scores by factors and nationality for teachers.

Factors	Nationality		Total
	Omani (N=164)	Non-Omani (N=159)	323
Accountability	26.8 (4.7)	29.0 (4.4)	27.8 (4.7)
Collaboration	26.7 (5.2)	29.2 (4.8)	27.9 (5.2)
Improvement	24.6 (4.7)	27.0 (5.0)	25.8 (5.0)
Relationships	27.3 (4.6)	29.0 (4.3)	28.1 (4.5)
Values	26.7 (4.6)	29.3 (4.3)	27.9 (4.7)
Vision	25.0 (5.4)	27.7 (5.3)	26.3 (5.6)
TOTAL	157.4 (26.8)	171.6 (25.9)	164.2 (27.5)

In order to determine which Principal Leadership scores differed over teachers nationality, Tukey's HSD Tests were conducted. Results of this analysis were consistent with the absence of a three-way interaction in that they resembled the pattern of results over gender. Differences in the 6 principal leadership factor scores for Omani teachers resembled the pattern for female teachers: Principals' seeking improvement and sharing vision were rated by teachers as equal to each other, but were both rated lower than the other four factors. None of the other factor scores differed from each other.

For non-Omani teachers, results were similar to those for male teachers: Principals' seeking improvement were rated lower than all other factors, and sharing vision was rated lower than all factors except seeking improvement. These values are depicted in Figure 6.5. As this figure suggests, non-Omani teachers rated their respective principals higher on all factors than did their Omani colleagues. In light of the movement towards the Omanisation of the teaching profession, these findings are important. It is apparent than for the reform to be implemented by an Omani teaching force those facets of leadership which most apply to Omani principals and teachers will need to be addressed and those most relevant for non-Omani principals and teachers will need to be marginalised, at least in the transition period

Survey Item 4: Collaborative Culture Survey - Teachers

The teachers' responses to the Collaborative Culture survey reflect their assessment of their own leadership behaviour. The mean values of the six collaborative culture leadership factors for teachers, categorised by district, gender, and nationality, are illustrated in Appendix Five.

As with the data for principal leadership, initial analyses on the collaborative culture surveys were conducted to determine whether the teachers' perceptions of their own leadership behaviour differed by gender and/or nationality. A Three-Way (gender and nationality and factors) ANOVA was conducted on the six leadership factors for teachers[31]. Results of this analysis are depicted in Appendix Five.

Although the 3 factors did not interact, total scores for the leadership factors of Collaborative Culture were not the same across gender (see Appendix Five). No other factors interacted with sub-scale scores. The only other finding in the omnibus analysis of teachers' self-perceptions of leadership was a significant main effect of nationality.

Effects of Gender on Collaborative Culture Factors

In order to test the effects of gender of teachers on their self-perceptions of collaborative culture, a One-Way ANOVA was conducted at each level of gender. Results of this analysis showed that neither male teachers nor their female colleagues self-perceptions of Collaborative Culture were equal across the 6 factors. Mean values for the 6 Collaborative Culture sub-scales, collapsed over nationality, are presented in Table 6.10.

---

[31]As the degrees of freedom from the analyses indicate, 30 cases (i.e., teachers) were deleted from the analyses. While only 6 teachers were excluded due to missing collaborative culture survey values, the remaining 24 cases were excluded due to missing demographic data. (Note: a total of 25 teachers were missing demographic data, although 1 teacher who was missing collaborative culture survey values was also missing demographic data. Thus, the total number of cases excluded from the Three-Way ANOVA was 30.)

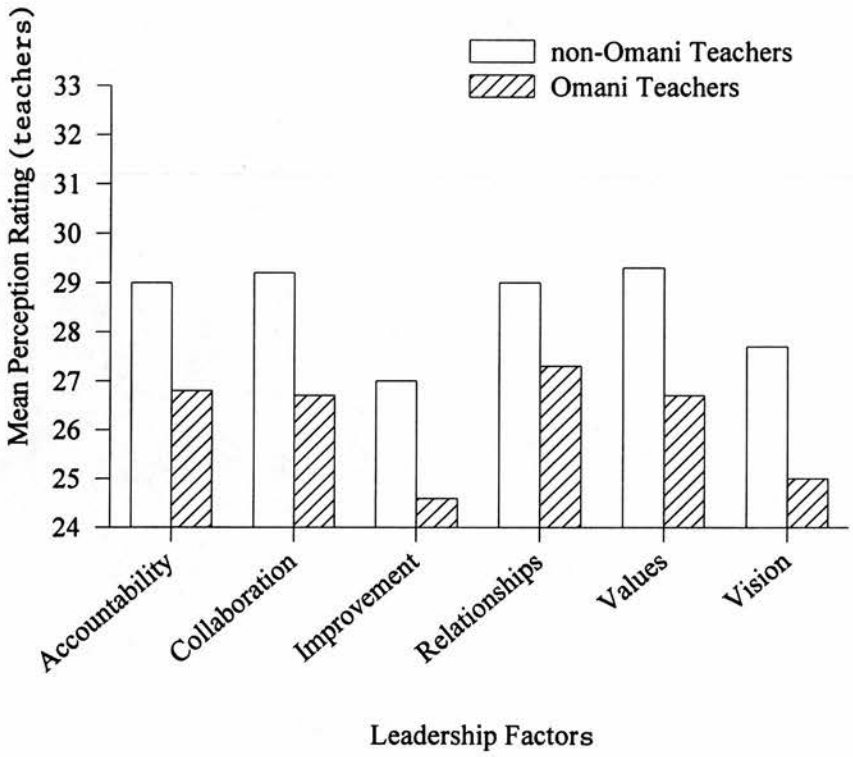


Figure 6.5 Mean ratings of teachers' perceptions of principal leadership by nationality.

Tukey's HSD Tests were conducted over factors for each gender in order to determine which leadership score(s) differed for males and females. Results, illustrated in Figure 6, showed that male teachers' self-perceptions of sharing vision were rated lower than all other factors of leadership except developing collaboration. Self-perceptions of developing collaboration were also rated lower than all other factors. In addition, building accountability was rated higher than seeking improvement.

No other leadership factor rating differed. However, the pattern of findings for female teachers was slightly different (see Figure 6.6). Similar to their male colleagues, sharing vision and building collaboration were rated lowest of all leadership factors. Their self-perceptions of sharing vision were rated lower than all other factors except developing collaboration, and their self-perceptions of developing collaboration were also rated lower than all other factors.

The remaining comparisons differed. Self-perceptions of developing values were rated lower than building relationships and accountability. Building relationships was rated higher than all other factors except seeking improvement and building accountability. Finally, female teachers' self-perceptions of building accountability were rated highest of all leadership factors.

A final comparison across gender was conducted to determine the overall self-perceptions of leadership differed. Analyses showed that for all leadership factors except building accountability, male teachers' self-perceptions of collaborative culture were higher than female teachers' self-perceptions (see Table 6.10).

Table 6.10 Mean(±SD) Collaborative Culture scores by factors and gender for teachers.

Factors	**Gender**		**Total**
	Male (N=171)	**Female (N=173)**	**344**
Accountability	**29.6 (3.2)**	**29.6 (3.2)**	**29.6 (3.2)**
Collaboration	**27.9 (3.9)**	**26.9 (4.1)**	**27.4 (4.0)**
Improvement	**28.8 (3.6)**	**28.0 (3.7)**	**28.4 (3.7)**
Relationships	**29.4 (3.5)**	**28.6 (3.1)**	**29.0 (3.3)**
Values	**29.2 (3.5)**	**27.6 (4.1)**	**28.3(3.9)**
Vision	**27.3 (4.4)**	**26.7 (4.6)**	**27.0 (4.5)**
TOTAL	**172.3 (19.0)**	**167.5 (20.0)**	**169.9 (19.7)**

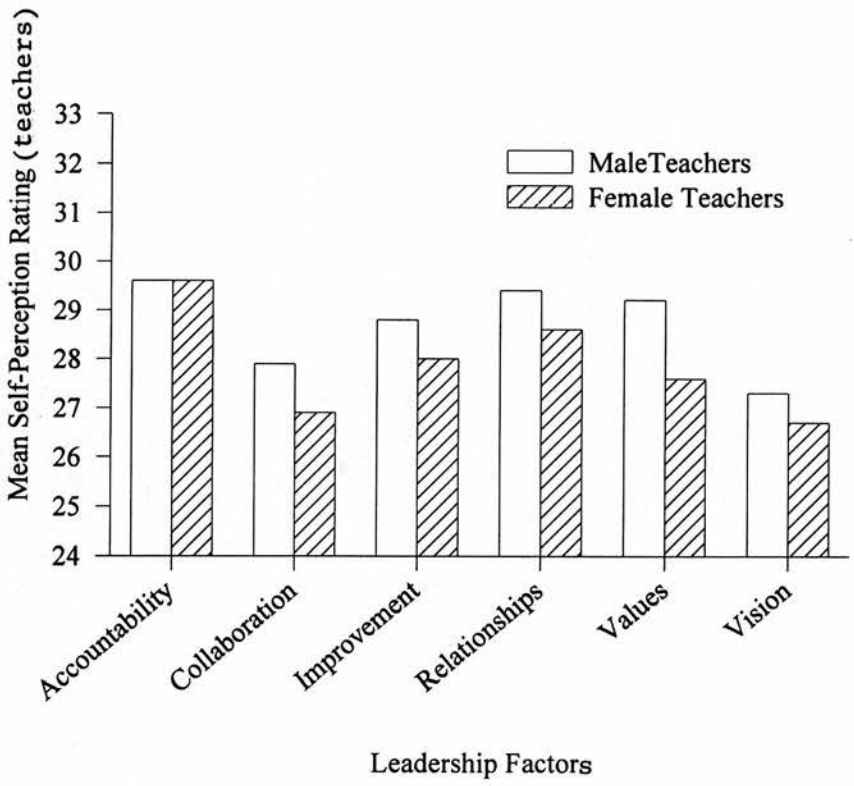


Figure 6.6 Mean ratings of teachers' self-perceptions of Collaborative Culture by gender.

Regarding the nationality effect, Tukey HSD Tests were used to compare mean self-perception scores by nationality. Results indicated that non-Omani teachers rated themselves higher than Omani teachers on all leadership factors.

A total of one hundred forty-two (approximately 41%) teachers added additional comments to the surveys. These comments are summarised in Table 6.11. Similar to the principals' comments, the most frequent observations noted by teachers were general positive critiques of the study and/or the questionnaire, and that their schools lacked a School Curriculum Committee referred to in some of the survey items. Additional comments of teachers covered a wider range of topics than did those of the principals. This was very likely due to the greater number of teachers who were sampled compared to the number of principals, as well as the differences in status between them.

In general, teachers made a much wider variety of both specific and general comments than did principals. An immediate difference between principals and teachers emerged when comparing the remaining comments that did not pertain to either the study or the lack of a curriculum committee. Nearly 14% of the principals (from 5 schools) made comments that referred to their respective school's efforts toward reform.

Table 6.11 Teachers' Comments and Suggestions Regarding Survey and Reform

Number of Tachers	***Comments***
	General Comments
24	Positive comments of study and/or questionnaire
34	No School Curriculum Committee
2	Survey did not include non-teaching participants (e.g., parents, students) in the sample
3	I was not certain whether many of the policies outlined in the survey are implemented in our school
3	Teachers cannot answer questions about principals that refer to personal development or what they do on their own time. Teachers are not privy to this information
1	Some survey items refer to responsibilities that are not the teacher's
10	Many survey items were ambiguous
1	The survey neglected specific conditions of the teacher and relations between teacher and student
1	Collection of demographic data at beginning of survey discourages honest responses
1	Researcher should conduct field visits to secondary schools to review progress of Reform
Table 6.11 Continued	

Number of Teachers	*Comments*
	Critiques of Principals
5	Positive general comments of principals (e.g., very caring; helps teachers solve problems)
2	Results are more important to the principal than are consideration of methods
1	Principals should involve/meet with parents
1	Principals need to provide moral and material support
2	Principals should respect the opinions of teachers and/or students
1	Principals should inform/involve the parents' council
1	Principals should encourage students
1	Principals should develop school activities
1	Principals should build trust between administration, school, and students
1	Selection methods of principals should be changed
2	New principals are not adequately trained
1	Expatriate principals lack vision because they work under contracts for limited periods of
1	Expatriate principals have different values and should not be principals in Oman
	Comments relating to schools' efforts toward Reform
7	Positive general comments of school's efforts[a]
9	Our school has not incorporated any teacher enhancement/development programs
10	Many of the objectives are not implemented in our schools
3	School objectives are not primarily academic
2	Reform will not work due to lack of resources
	Suggestions for Reform
	Relating to Staff Management/Interactions
1	Develop an administrative body to regulate the individual schools
1	Develop administration-teacher co-ordination of efforts and build trust between the two
1	Teachers and administration should meet to discuss problems and find solutions
3	Co-operation is needed between teachers and/or between principals and teachers and/or
1	Compel principals to express their views of the current status and what changes should
	Relating to Teaching
3	Suggestions of specific teaching methods (e.g., dialogue method, student involvement in
2	Eliminate certain methods of teaching (e.g., Dictation method). Encourage thinking and
8	Teachers need training on new methods and/or technology
Table 6.11 Continued	

Number of Teachers	*Comments*
	Suggestions for Reform (continued)
4	Teachers need more time to work on teaching rather than administrative tasks
5	Teachers should not be assigned tasks that are not congruent with his/her specialisation
1	Students should be involved in lesson planning
1	Tours should be assigned by a teacher in the most relevant subject area relating to the tour
	Relating to Students/Student Problems
1	Students with heavy class loads should have extra time to use the libraries
2	Some students need extra study time during non-academic periods (e.g., sports)
3	Relationship between school and students' homes is needed
1	Encourage extracurricular activities (e.g., clubs, sports) to students
5	Policies on dealing with trouble-makers need to be more strict and/or enforced
	Relating to Curriculum
2	More Arabic training is needed
2	Implant Islamic values into curriculum to increase moral values and desire to learn
4	Improve technology
2	More practical experiences are needed (e.g., laboratory)
1	Update curriculum
2	Assign additional non-academic projects/seminars to enhance students' awareness
1	Focus on ideas rather than academic studies
	Comments Relating to Current Status in School
1	I will only work to achieve changes that coincide with my own values
2	Decentralise the central administration
1	Work pressure makes relations between teachers and principals superficial and related to
2	There is no time in teachers' schedules to meet and discuss reforms
3	Disagreements among teachers prevents discussion
1	Some teachers fulfill their academic obligations but are not concerned with improving
2	Diverse nationalities of teachers discourages unified co-operation
1	Too many activities are not focussed on education
2	Teaching is too restricted; Teachers need more flexibility
5	Teachers opinions are considered irrelevant
5	Teachers are not involved in decision making

Table 6.11 Continued

Number of Teachers	*Comments*
	Other General Comments
4	Provide useful books/periodicals to the library
1	Recognise/honour teachers who exert extra efforts to the Reform
	Other General Comments (continued)
1	Provide incentives for teachers and students to contribute to the Reform
1	Focus on data tabulation
1	Have different campaign activities
1	Have tours to cultural sights

Note. Several teachers made more than one comment.

[a]Some of these comments came from teachers at the same school

Only 2% of the total number of teachers (from 7 schools) surveyed noted any positive efforts made by their respective schools. What is interesting about this discrepancy is that the teachers' comments came from over 75% of the districts, but no more than a single teacher from each of the districts noted any progress at their respective schools. Whether this is a lack of perception of progress or an oversight is unclear. However, teachers' comments, like principals' comments, were largely focussed on their own specific jobs, their own frustrations and/or suggestions for the Reform.

Some teachers stated that they had difficulty rating many of the principal survey items because they did not have direct knowledge of much of their principal's activities, but an equal number of teachers criticised their principals as those who made positive general comments about them. Teachers did not make any general criticisms of themselves, except that they needed training in modern teaching methods.

Several teachers made reference to their frustrating circumstances. Many specifically stated that they needed to be involved in decision-making and needed more time to meet with other staff to discuss and attempt to solve problems. This is congruent with their wishing for more responsibility and a greater leadership role, rather than just following directives from superiors.

With regard to values, three types of statements were made by the teachers. One referred to changes that would increase the students' values, one type noted that expatriate teachers' and principals' values conflicted with Omani values and suggested that this would interfere with the Reform, and one referred to a teacher's own values in relation to the reform. This teacher admitted that it was his own values that he would work to incorporate into the Reform, and no other kind.

Finally, many teachers made reference to the students. Most of these comments referred to improving and/or enhancing their education, but like principals, it was also suggested by teachers that students be held more accountable for their own behaviour.

Part Three: The Research Questions Addressed

The extent to which the preceived leadership traits of principals foster a collaborative culture

The first reseach question addresses whether any relationship exists between the teachers' perceptions of the principals' leadership behaviour and their self-perceptions of their own behaviour. In order to test for evidence of facilitive principal leadership, teachers' perceptions of their principals' leadership were compared to their own self-perceptions of collaborative culture. Teachers' total Principal Leadership scores and sub-scores for the 6 leadership factors were correlated with their Collaborative Culture total scores and sub-scores using the Spearman rank-order correlation coefficient.

While overall, teachers rated themselves and their principals highly, all correlations among the six leadership factors are indeed moderate to strong reflections of facilitative leadership (see Appendix Five).

The extent to which preceived leadership traits of teachers foster a collaborative culture

The second research question pertained to the teachers' self-perceptions of their own leadership behaviour. While the sample of teachers was fairly large, it is important to remember that there were proportionately more Omani teachers in the sample than there are at present in the general population of teachers.

Although the pattern of self-perceptions of the collaborative culture behaviours of teachers did not differ by the nationality of the teachers, the findings presented here may reflect the perceptions of the population of teachers more accurately when demographic variables are taken into consideration. Indeed, not only are they expatriates, but the sample of non-Omani teachers were approximately 13 years older and had a correlative average greater number of years (approximately 11) teaching experience than did Omani teachers. Thus, overall perceptions of teachers may be reflective of the greater experience of non-native teachers. Nevertheless, the perceptions of non-Omani teachers may best reflect the general population of teachers, since the majority of secondary school teachers in Oman are expatriates.

The approximate mean self-perceived leadership rating for teachers was similar to the principals' self-assessment of their own behaviour, teachers overall rating of their own perceptions of collaborative culture were fairly high. However, teachers' self-perceptions of their own leadership behaviours significantly differed by gender. The pattern of rating over the 6 leadership factors differed; males rated themselves more favourably than did females on all factors except developing collaboration (see Table 6.10 and Figure 6.6).

For both male and female teachers, sharing vision and developing collaboration were rated lower than all other factors. This difference seemed also to be reflected in the comments that teachers made at the end of the surveys. For example, several teachers added that they were not certain if many of the objectives were currently being implemented in their respective schools. In addition, while principals made several comments of their respective school's efforts toward the Reform, only 7 teachers said that their school was incorporating/initiating specific objectives[32]. This is an interesting - if also troublesome - sentiment as it indicates that teachers have little knowledge of the curriculum and administrative workings of their schools. There is more than one possible explanation for these findings. First, it may be due to teachers' lack of certainty or understanding of precisely what the objectives are. Second, it may be due to teachers' lack of knowledge of what measures are in fact currently being implemented. Third, it may be in fact that too few objectives are being implemented. Fourth, the method of data collection may not have sufficiently measured these perceptions. Finally, any combination of these explanations is also possible. Whatever the reasons are, it can certainly be argued that this is related to (the reported lack of) sharing vision (relative to other factors). It must be remembered though, that if teachers are not informed of what the visions are as outlined in the RDGE, then their relatively low self-rating of sharing vision cannot be regarded as self-criticism. Instead one may note the immediate necessity of educating and involving them in the Reform process and goals.

The other self-perceived factor that was rated lowest by all teachers was developing collaboration. This was also reflected in their comments. Teachers often noted that they did not have time to meet to work together and identify and solve problems, and/or that there were some teachers who were not interested in developing or improving a collaborative

---

[32]Further, 2 of these 7 teachers came from the same school.

environment. In addition, although the above tasks would be considered administrative efforts, several teachers also commented that they had too many non-teaching (i.e., administrative) duties required of teachers, and that these duties interfered with their performance as teachers. Thus, it appears that improving the developing collaboration factor would not only require time for teachers to work together, it would also require both willingness and effort by them.

The gender interaction found in the teachers' self-assessment was due to the pattern of differences across the remaining factors. Male teachers rated their own seeking improvement less than their building accountability and female teachers rated their own developing values lower than building relationships. In addition building accountability was rated higher than all other factors by female teachers.

While teachers' perceptions of principals were slightly more critical than principals' ratings of themselves, this difference was not apparent for perceptions of the leadership behaviours of teachers. This is illustrated by comparing the last column of Table 6.2 (principals' ratings of teachers) with the last row of (Appendix Five) (teachers' ratings of themselves); While principals rated themselves more favourably than teachers rated principals, principals rated teachers about the same as teachers rated themselves.

The relationship between the leadership traits of principals and teachers as perceived by the teachers.

The third research question looked at the perception teachers had of the leadership traits of principals and teachers. Compared to principals' self-assessment of their own behaviour, teachers appeared to rate their principals more harshly than principals rated themselves. This is best illustrated by comparing the values in the last column of Table 6.5 with the last row of (Appendix Five). Teachers rated principals seeking improvement lower than all other factors and sharing vision lower than all factors except seeking improvement. The interaction of gender and factor was due to the fact that male teachers rated the principals slightly more favourably on improvement than female teachers did. The teachers ratings over nationality were similar to those over gender, however the Omani teachers rated the principals slightly lower than their non-Omani colleagues.

Qualitative Analyses (In-Depth Interviews)

To supplement survey findings, interviews of a sub-sample of principals and teachers were conducted subsequent to the collection of the survey information. The form of the interview questions focussed on specific examples of the 6 leadership factors outlined

previously. A sub-sample of 9 principals and 18 teachers (2 teachers from each school) [33] from the original sample was desired for further questioning. The results of these interviews, presented below. Since a relatively small number of individuals participated in the interview portion of the project, these findings are presented separately, rather than in direct comparison with the corresponding perceptions obtained from the survey portion of the study. Where appropriate, data from the quantitative portion of the analyses are referred to.

Interviews were conducted in the field at a prearranged time, and were subsequently translated by the researcher into English for interpretation. The interviews were conducted very informally, and in most cases, the format of the interview did not follow the designated protocol. Nevertheless, the results of these interviews provide some useful information that facilitated interpretation of the qualitative survey results as well as the related statistical analyses. This information also added to the knowledge that was inferred from the survey analyses. It should be noted here that the interview protocol for principals prompted observations generally of teachers' behaviours, and vice-versa. Therefore, the majority of the comments made by principals are about teachers, and the majority of the comments made by teachers are about their respective principals. In addition, due to time restraints, there were no items on the interview protocol that attempted to directly measure any negative criticisms of the Reform, or specific past or current practices at a given school. Only very occasionally were negative comments made by individuals interviewed.

Interview Results

As stated previously, teachers received relatively high scores by their principals on all six dimensions (see Table 6.6). This is indicative of principals' high expectation of and confidence in the teachers. This will stand the teachers education system well as SBE is introduced. Similarly, the overall perception of the teachers was that their principals were highly valued and practised collaboration. This is reflected by the high collaboration score

that teachers rated principals on the Principal Leadership Survey (see Appendix Five) and Figures 6.4 and 6.5). A teacher from one school commented,

> *Our biggest value is shared decision making. We have collaborative meetings every Saturday in base groups. More difficult issues that really require a buy-in by the teachers to be effective are done in Saturday meetings."*

---

[33] All the participants were from the Capital district and represent male/female principals and teachers.

The confidence and trust that one of the principals interviewed has for the teachers' competence is illustrated by an example that she gave regarding a situation where the teachers had to work together to solve a problem. Teachers' initial efforts to find a solution to the problem were not successful, because the solution was not workable. Rather than interfering, or offering her own solution, this principal simply returned the problem to the teachers. This time, they came up with a solution that was acceptable to everyone. This is a good example of principal who facilitates the development of collaborative practices among the teachers. We note here, however, that it is not clear from the interview whether this process was initiated by the principal as a direct result of the Reform initiative, or whether this principal tends to manage with this type of delegating style. More detailed discussion of this point appears below.

A different teacher interviewed also indicated a facilitive effort of her principal. This teacher indicated that her principal respects the teachers and creates mutual trust among them, in addition to concerning herself with the education objectives, resolution of teaching problems, and adapting to the new developments within the school.

A principal from a different district, however, contended that shared leadership will be difficult to implement without formal training of the teachers. This was also indicated by (only) one principal in the comment section of his/her survey, who indicated that training of teachers was essential. Nevertheless, comments of the teachers from the school of the principal who was interviewed indicated that this principal has established an environment in which improvement and change are encouraged and nurtured. These comments included that the principal was very innovative and very supportive of risk-taking. In addition, this principal communicated that there is an acceptable level of quality expected in improvement efforts. Another teacher, who indicated a sincere appreciation of the collaborative practices at school, commented,

> *"If there is only one teacher complaining, and no one else wants to join, then it is unfortunate that the teacher feels that way. But if there is a group that is willing to study and put time in, then the efforts of that group can come back to all of the teachers with a recommendation."*

Another school in the district where these teachers work was rated lower on most of the 6 dimensions than other schools. Interview comments of the principal from this school believes that collaboration is improving the educational climate of the school. However, teachers comments and descriptions of the principal's actions illustrate the narrow definition

and parameters within which collaboration is actually taking place. Again, this is evident from the survey results; teachers from this school rated their principal lower than all other schools' principals were rated. The principal from this school made other comments that support this position, including that the teachers continually come to him or to discuss new methods that they wish to try in their classrooms. This principal stated that teachers are afforded the flexibility to try to succeed or fail in their classroom(s) using their own discretion. This principal also stated that decision making usually comes by departments, who by consensus decide how they want to do business.

Other teachers' statements parallel this principal's comments. One teacher commented that his or her principal will often take a minute out of his or her time to talk to teachers when they have a concern that they wish to express to the principal. This teacher also added that the principal often asks for teachers' help in solving school problems, and seeks input from teachers regarding ideas for creating a better school climate together.

Another teachers commented that the principal asks for support, advice, and feedback concerning problem students. Altogether, the teachers form this school rated their principal highest on the values dimension. This was also supported in the interview by such comments as, "[The principal] retains tradition, and old-school values," and, "While in school, academics come before after school activities such as jobs and athletics."

Although the principal from this school indicated that teacher collaboration is beneficial, he also seemed to assume a passive role in the process. Supporting comments included,

> *Our tenth and eleventh grade teams are much more enthusiastic in the reform process and feel like they will have much more ownership in the program when it will be implemented...I try to stay out of the way. It may be hard, but you have to let teachers decide how they want to do things. I try to step aside but be there to assist the teachers when they ask for advice.*

Another school was one of the schools in which the vision dimension was ranked highly. Teachers from this school also assigned their principal high scores on the values and collaboration dimensions. The principal's ratings of the teachers show little variability across the 6 dimensions. This principal consistently gave his staff scores of 4 or above on all dimensions. Values and collaboration received the highest scores. This is evident by several of the principal's interview comments, including,

I try to maintain a positive attitude and outlook.. searching for the good things out there. We celebrate successes [and] challenge ourselves in a reasonable sort of way. This is difficult to accomplish because there are so many negative pressures on education today. It is a constant daily challenge.

This principal explained that whether teachers are working as members of a team or in collaboration with a group of colleagues, there is a core of basic beliefs which have been identified and guide school members actions. These operation principles are posted, and include, "We will conduct business in an open, honest, and fair manner, keeping the best interest of the students [at this school in mind."

According to the principal, there is another set of core principles that are shared by the teachers at this school (which are not for public consumption). These principles deal with how the staff treat each other in the building. For example, "Speak with truth." The commitment of the principal to the teachers and collaborative practices at this school is evident. This principal's ability to develop a culture within which collaboration and continuous improvement are nurtured is illustrated in comments such as,

...giving people the opportunity and power to make changes in the school...to keep an open door policy. When you make a suggestion as a principal, if it doesn't go, then you say, "Okay, which direction would you like to see." Unless it is something that you feel so, so strongly about that you couldn't live with going in another direction. Quite frankly, I haven't had that happen to me in [several] years.

Teachers' comments that support the principal's statement include, "Teachers are encouraged and given time to be active," and, "very little decision making [goes on] behind closed doors."

A different teacher spoke to the same policy, stating,

Our principal has always emphasised that he/she is willing to innovate and wants the best programs for the students and teachers. The teachers are willing to try new things, experiment and evaluate. With this, there is always a risk of some failure. It is known to the teachers that the principal is there for us and will support us through new undertakings and that the fear of failure need not be prominent on our minds.

Another teacher highly praised the administration of the school. This teacher stated that the principal's concern was evident by continuous discussion with teachers with regard to obstacles and problems faced by the teachers, whether they pertain to the curriculum or the classroom. This principal seeks to solve such problems through meetings and discussions where the teachers opinions are valued. The teacher who made this comment stated that this behaviour by the principal was highly motivating in that it drives him/her to increase his/her knowledge of teaching methods. This survey of leadership and collaboration in secondary schools answered the three fundamental questions. These refer to the role of collaboration and the development of perceptions of leadership, which may exist between principals and teachers. The literature review also, has concluded that effective curriculum reform will depend on shared leadership in a collaborative school culture.

The findings indicate that although these perceptions of leadership may be possible, in that principals and teachers do see the other group is a fairly positive manner, nevertheless the possibilities for collaboration are limited. This being the case the proposed SBC Reform seems unlikely to succeed unless structures and processes are put in place to aid the development of collaboration. Because collaboration has been seen as a key feature of moral visionary leadership. The question emerges as to how such leadership can be encouraged in secondary school in Oman.

Chapter Seven

The Unfinished Agenda of Reform

Since 1970 there have been several key phases in Oman's educational system development. From 1980 to 1987 there were evaluations of the curriculum and educational system. Based on these evaluations, improvements were undertaken, including introduction of a new curriculum in 1988. Over several years this curriculum underwent continued improvements, and these were incorporated in more and more schools. From 1995 to the present (2001) further elements of education reforms were introduced, including more student-centred teaching techniques, strengthened infrastructures in the schools, development of computer networking and resource centres, increased instructional time in the day and in the year, and gradual introduction of a standards based curriculum at the secondary level.

Into this interesting context, the research provides a "snapshot" of a nation's secondary schools just before they are poised to participate fully in reform.

When Oman's modern formal educational system had originated in the 1970s, most of the available teaching were expatriates. As a result of the shortage of native Omani teachers, an educational policy was formed that functioned within the nation of centrally controlled system. This system followed a strict, detailed and unvarying curriculum and instructional standards. The result of this was a centralised, hierarchical control over individual educational institutions, and a curriculum that prescribed a uniform and Oman-oriented education that emphasised its history, its traditions, and its values.

In the previous chapter it has been seen that principals and teachers are indeed under extreme pressure to ensure efficacious implementation of the Reform programme and that there are certain signs of the possibilities and opportunities for increasing moral and collegial, leadership. In Chapter Four, the importance of a leadership is for any satisfactory implementation programme was discussed. This is particularly the case in a country such as Oman where, as noted in Chapter Three, there are historical and cultural factors which mitigate against the wholesome acceptance of a curriculum which itself may have been introduced through the pressures of globalisation.

In Chapters One and Two, these pressures and the impact on curriculum development in Oman were examined and the importance for innovative styles of leadership became apparent. Therefore leadership has become a central concern of this thesis. It is argued that through the enhancement of appropriate styles of leadership, especially collegial and moral leadership, the implementation of curriculum reform may become successful. To achieve this success, it has become apparent that school principals and teachers must be encouraged to see their work in a more collaborative context.

Indeed, for successful implementation of the educational reforms in Oman to take place, many factors are involved. The central focus of the present study has been on educational leadership. While there are numerous theories of leadership in general, educational leadership in Oman (in particular) has previously received little attention. This lack of emphasis on leadership has been due primarily to the centralised control of the education system. Expatriate consultants were sought for guidance rather than developing the skills and understandings of local members of the system. Not only was there no particular consideration for the role of leadership as a factor in education in Oman, but also there was little or no opportunity nor mechanism for formal educational leaders such as the principals to develop or improve their leadership skills.

As complexities and variations are introduced to the Omani educational system, due to globalisation pressures and the Reform efforts, a collaborative initiative that utilises shared leadership practices is seen as necessary for successful realisation of these changes and goals.

The importance of appropriate styles of leadership for the implementation of the reform is impossible to exaggerate. Without collegial and moral leadership, the reforms may fail drastically. At the same time, Oman is moving towards the international community in terms of trade, privatisation and partnership in the World Trade Organisation (WTO). It cannot therefore afford for its educational infrastructure to fail in its support of these macro-economic developments.

The thesis also reveals that education cannot be seen as separate from these overriding economic and political policy concerns. They complement each other: without successful educational reforms there may be severe doubts about the social and personal advantages of trade liberalisation and WTO membership. Conversely, without the introduction of high-tech information technology, brought about through trade agreements, the education reform programme will be under-resourced. In these circumstances this information technology may fail and can be seen as disaster for Oman. Oman is a country with a history, which is distinguished by looking outward. It is more liberal than many of its neighbours and is very interested in maintaining international links with the other parts of the world. It is into this geo-political domain that the research has resonances.

In that context the Omani educational system has recently been exposed to thorough review, particularly by external and independent educational expertise. The most recent of these was a World Bank mission (World Bank, 2001)[34]. The Bank in its unpublished report

---

[34] Country Report: (Unpublished Report available on request from the World Bank).

stated that "no other country has made such formidable progress in such a short time." The Bank report quotes particularly such achievements as the phenomenal increase in elementary education enrolment, the progressively decreasing rate of illiteracy, and the shrinking gender gap. This means that a firm ground base of the current "Omani Basic Education Reform" and other measures, both local and international, and designed to bring Omani education close to modern global changes and requirements seemed to be well catered for.

The education reform policies of the later 1990s resulting from the 20:20 Vision and the (RDGE) take into consideration the impact of globalisation in curriculum reform. In order to achieve a curriculum that is standards-driven and focuses on student learning and performance measures, Oman's policy-makers have proposed several necessary changes.

These changes resulted in the progression of the educational philosophy from a behaviourist approach, that maintains learning is externally controlled by the teacher, to a more constructive perspective, which maintains that learning is more of a active process (Ryan and Copper 2001). These changes have been included curriculum reform.

The most important structural change proposed by the reform is the elimination of the hierarchical and centralised control of the education process, in favour of a more decentralised regional and local control structure. The central control has been reduced to defining and prescribing a broad framework of (core) curriculum and standards. This curriculum includes not only changes in subject matter, language skills, mathematics, science and social history, but also the way instruction is delivered, and the way performance is assessed. It becomes apparent that curricular innovations are supportive of a view of society as part of a globalising political, economic, and technological world.

For several decades, globalisation and its effects have been a concern of many nations, particularly in relation to their ability to participate competitively in an international society (Walker & Dimmock 2000). In an effort to maximise their ability to participate in a global society, countries like Oman have had to restructure their system of education.

Quality education is critical to a nation's success in a global society. Evidence has shown that good education and high literacy rates directly have an impact on wages as well as the ability of developing countries to increase their productivity and competitiveness (e.g. Brown & Lauder 1996; Pellerin 1996; Spybey 1996). Therefore, for high-growth, for countries like Oman, globalisation will be economically and educationally advantageous and will become necessary for these countries to successfully participate in a global issues (Ilon 1994). Thus as a result of the need to adapt to the structures and practices of developed nation in order to gain prominence in the world society, Omani educational policies are in a state of transformation.

In addition, as the staff of expatriate teachers in Oman is shrinking, since teacher-training standards were expanded in the 1990s, the control over classroom practices by the Ministry of Education has taken a higher educational priority of globalisation. As a result, the curriculum design was changed from content-based to standards-based. Finally, the traditional method of teaching where the teacher playing the role as a transmitter of knowledge to the role of facilitator of learning is facilitated. Together with the curriculum changes, students' roles are expected to change from those of receivers of knowledge to those of active learners.

Therefore it is very important for Omani principals and teachers to see their central role in the efficacious implementation of the curriculum reform programme. It is essential that these professionals recognise that their contribution to the implementation process goes beyond educational concerns to the very backbone of the Omani society - that is to Oman's future economic performance in a highly competitive world market.

This present study contends that educational leadership is the primary factor for successful implementation of the Reform. Indeed, a shared leadership framework is recommended that will enhance the Omani educational system's ability to realise the visions of the 20:20 Vision and achieve the economic goals of the RDGE.

It has sought to delineate and measure the current leadership practices of principals and teachers in the Omani secondary schools that will implement the standards-based curriculum. This researcher has identified six factors that are considered to be essential components of the shared leadership that would be appropriate for this task in Oman. These six factors (discussed in detail in Chapter Four) are sharing vision, developing values, seeking improvement, building relationships, developing collaboration, and building accountability. The primary focus of this research was to determine the extent to which these six factors are being implemented, and whether they would indicate that a collaborative culture exists within the Omani secondary schools that would facilitate successful realisation of the RDGE.

Since this study presents an initial assessment of the current leadership structure within secondary schools in Oman, there are no formal comparisons that can be made between the variables measured here and any prior information that we have. Evidence of facilitative leadership from the present study requires the presence of a significant statistical association between teachers' perceptions of their own leadership behaviour. The magnitude of these associations, as well as the magnitude of the perceptions must also be considered.

From these data many suggestions can be made to aid in the Reform effort. Two such suggestions seem pertinent. Firstly, from the comments of teachers suggest that teachers need to be educated regarding the RDGE. In addition to the analyses of the data, teachers'

suggestions for the reform indicate that they may not be aware that their suggestions are indeed anticipated by the Reform. Secondly, including the organisational 'followers' (i.e. teachers) in this study has provided data that illustrates clearly that teachers do not currently see themselves and/or feel as though they can be effective proponents of such changes in the Reform. Indeed teachers at some schools indicated that they are not even aware of how the curriculum is determined. Plans to promulgate Reform initiatives to teachers should include teachers as necessary and active proponents of the Reform, rather than simply educating and/or informing them. As suggested by Smith and Scott (1990) it appears necessary from these data that efforts are made so that teachers believe that they are essential to the efforts, in addition to their being instructed on the goals of the Reform and the manner in which those goals will be realised. In addition to the perceptions of the teachers, the perceptions of the principals are particularly illustrative on this point. Principals rated both seeking improvement and sharing vision lowest, whether they were assessing their own behaviours or those of their teachers is not clear.

Although anecdotal, several of the comments made by teachers, in response to principals who clearly worked to involve teachers in the decision-making, indicate that this behaviour by principals is highly motivating. It seems that this issue is one that can be addressed relatively easily and immediately. For example, principals can be educated about this principle, in both basic and practical terms. However, there is an issue of trust that can arise from such training. If a principal does not ordinarily involve others in decision-making, then a sudden transition to the opposite behaviour of involving others in decision making, could make the teachers suspect some other motive by the principal. Therefore, if decision-making processes involves the teachers, then the behavioural changes that accompany this transition will be perceived more accurately.

The literature review of the study reveals that the 20:20 vision and the RDGE should have a significant impact on the development of education in Oman. Therefore, these are essential for the stakeholders and everyone who works in the reform process. However, there are many challenges that need to be addressed and solved in order to implement the intended reform and to achieve the required aims and objections. One of these challenges is the limited awareness of teachers and principals of the RDGE. Results of this study indicated that sharing vision was lower than the other factors. Therefore, the Ministry of Education should enable teachers, principals, parents and other related individuals in the society to have a clear vision and understanding of the RDGE. Principals and teachers should be encouraged to inform parents about their school's aims.

This awareness program can be implemented through the media (TV, Radio and newspapers) or through school meetings and parent-teacher conferences. There are still some

expatriate teachers who are teaching the basic education in the secondary level, and are not aware of the aims and objective of the reform education in Oman. Therefore, orientation programs for these teachers might be included in the discussion of the RDGE.

Some professional and educated parents can also be asked to participate in the awareness program. Such participation may include conveying to other parents their children's experience with the reform of basic education, and what kind of follow-up is expected from parents. According to Nias. J. (1986), positive leadership characterised by explicit aims for the school as a whole, within limits to negotiation, a high standard of personal commitment and professional competence, support and encouragement for individuals, the capacity to create a sense of cohesion within the school as a whole.

The second cycle of Basic education (grade 5-10) is starting in the next academic year 2001/2002, and the Ministry of Education needs to start its campaign to explain to parents and educators the main objectives and aims of this cycle by involving more professional leaders in such campaign in order to gain more support and co-operation.

Participation in decision making may enable teachers to have more knowledge and understanding about sharing vision. Teachers should be involved in attending seminars to discuss all aspects related to education in the 20:20 vision and the RDGE. Participation in decision making enhances responsibility, co-operation, and decentralisation. Furthermore, it increases care, involvement and achievement.

The results of this study revealed that sharing vision has a significant impact on the results of collaboration and seeking an improvement; yet seeking improvement and sharing vision were rated lower than all other factors. I may conclude from such results that if more effort and attention are given to clarify vision to all related parties, co-operation and seeking improvement would consequently be rated higher.

Comments of one of the respondents indicated that heavy teaching load is preventing this teacher from collaboration. Although this complaint was not mentioned by other respondents, the teaching load needs to be reconsidered in order to guarantee motivation for collaboration.

Good relationship, job satisfaction, and respect were identified by the respondents as very important factors of motivation. Principals can stimulate teaching to have a positive collaboration in the school environment. Therefore, principals should be trained on techniques of increasing teachers' satisfaction and morale such as delegation in decision making, recognition and encouragement of good work of the teachers, who put in extra efforts to the reform, building trust care and respect.

Lack of training for both teachers and principals seemed to be a major concern for some of the respondents of this study. Continued professional development is desirable and essential for all occupants of supervisory and managerial positions in schools. A main function of training should be to assist principals and teachers to master the new skills of teaching and supervision that are required in the reform process. These skills may include teaching of applying of the information technology into the curriculum, new ways to assess innovation of students, and in cooperation of extra curriculum activities. Training of principals can focus on motivation and job satisfaction of teachers, introducing teachers to new materials of teaching methods, time-tabling, school records, staff supervision and staff appraisal and accountability, March (1974) suggest that training of principals should include fundamental skills of administration and basic technology skills. He states that "The graceful wisdom of an educated person is not enough. An administrator needs to be competent both in the fundamental skills of administration and in the basic technology. Administration is a job, and it calls for talents and some of these talents are learnable.

The increasing number of basic education schools in Oman will require more training centres to be established in various education districts. Schools have to establish strong relationship with the colleges of education in their region in order to benefit from their professional human resources. Teachers and principals should be involved in identifying their training needs. Specialist and technicians of the learning resource centre should not be left out of the training process. They need special training on curriculum application to information technology. The Ministry of Education cannot rely only the training by the colleges of education. The training of trainers is very important and senior staff should be prepared through post-graduate studies to become trainers across all of Oman. Training centres need to be increased and fully equipped to meet the reforms needs.

The longer terms of schooling, and the rotation of students classes and the co-ordination of activities in basic education schools in Oman require a good management of timetabling and use of buildings and facilities. The need for a more sophisticated timetable for regulating the work of the school and rationing the use of the building and facilities in an orderly fashion becomes a major concern to every principal. Yet, the conversion of some old schools buildings to become basic education schools created a difficulty for the principals in terms of managing facilities. Some of these buildings require additional classrooms and laboratory space that are necessary for the implementation of the new curriculum. Classrooms for arts, music, and physical education require special design of buildings. Increasing the number of new schools buildings of basic education requires sufficient capital expenditure to be secured in the Ministry's budget. The trends of applying information technology into the curriculum necessitate the need for phone lines and Computer network servers to be installed in the design of the school buildings.

This research also indicates that at least some of those surveyed believe that there are pertinent conflicts in values between Omani and non-Omani teachers, as they pertain directly to the goals of the Reform. This information was indirectly obtained by unsolicited comments and interview from both principals and teachers, and was not a particular focus of the present study and this concern may be researched further. If indeed there are differences in values, then it is probable that such differences could hinder the Reform process. Certain shared values have been argued here as critical for a successful transition. This issue may be particularly troublesome, however, since values cannot easily be trained for these individuals. On this report, perhaps programmes to educate staff about differing values, or programmes for integrating or respecting values may be useful.

Once the curriculum in Oman is fully implemented, it will be critical to evaluate whether it does in fact achieve its intended goals. Ultimately, the Ministry of Education will seek thorough appraisal and evaluation of its curriculum reform to establish whether a standards-based curriculum addresses the needs of both students and Oman in the globalised world. This will require continual monitoring, evaluations and adjustments at all levels. Internal evaluation at each level will benefit progress toward successful implementation by quickly identifying and solving problems that will undoubtedly arise. This would allow all levels of the educational system in Oman to be informed about what progress has been made and achieved and what needs to be done to ensure successful overall implementation of *the* RDGE in Omani schools.

Conclusion and Comments

In conclusion, the success of the education reform in Oman depends on many interrelated coherent factors. These can be summarised as:

- Sharing vision about aims and objective of education in Oman with all interested parties.
- Collaboration between students, teachers, principals, and parents.
- Collaboration between schools colleges of education, universities, and public and private enterprises.
- Continuous training and professional development of teachers, principals and academic support staff by in-service re-training courses or to further post graduate studies. and
- Providing sufficient funds and technological resources for existing and new schools and expand this existing facilities to meet the needs.

The education reform in Oman cannot be successful without sufficient support and co-operation from all concerned groups and institutions. Principals and teachers have to establish contacts with colleagues, and strengthen their relationship with colleges for education regulating teaching practices and in-service courses.

It may become important for further research to focus upon the progress of the development of collegial and moral leadership within the ranks of Oman's secondary school teaching force. [For this style of leadership has been seen as a key component of the success (or otherwise) of educational reform in Oman].

Bibliography

Abbott, M. & Caracheo, F. (1988). "Power, authority, and bureaucracy". In N.J. Boyan (Ed.), *Handbook of Research on Educational Administration* (pp. 239-257). New York: Longman.

Adams, R. S. and Chen, D. (1981). *The process of educational innovation: An international perspective.* Paris: Kogan Page Ltd.

Al Adawi, S. (1999). *The Administration of Change.*

Al-Belushi S., Al Adawi, S. & Al-Kitani S. (1999) *Education reform in the Sultanate of Oman.* Unpublished document, Ministry of Education, Sultanate of Oman.

Al-Hammami H. S. (1999). *Education for the 21st Century: General education reform in the Sultanate of Oman: Motives, nature, and strategies of implementation.* Unpublished dissertation, University of Birmingham, Birmingham, England

Al-Hussaini A. (2001) *University of the 21st century Opportunities and Challenges*: SQU Journal for Scientific Research: Medical Sciences 2001, I, 1-2 Sultan Qaboos University Sultanate of Oman

Al-Nhar, T. Billeh, V. (1997) *Monitoring of learning achievement project: Assessment of learning achievement of grade 4 students in Oman.* Unpublished document, Ministry of Education, Sultanate of Oman.

Baizen, A. (1994). *The primary education reform programme in Ethiopia. In Dalin, P. (1994). How schools improve: An international report.* London, Eng.: Cassell Educational Limited.

Bass, B.M.(1985). *Leadership and Performance beyond expectations.* New York:The Free Press.Bass, B.M. (1981). *Stogdill's Handbook of Leadership.* New York: The Free Press.Beauchamp, G.A. (1964). *Curriculum Theory* (2nd ed.). Wilmett, IL: The Kagg Press.

Beauchamp, G.A. (1981). *Curriculum Theory* (4th ed.). Itasca, IL: Peacock.

Beck, L.G. & Murphy, J. (1993). *Understanding the Principalship: Metaphorical Themes, 1920-1990s.* New York: Teachers College Press.

Bell, T.H. (1993). *Reflections one decade after a Nation at Risk.* Phi Delta Kappan, 74,592-597.

Bennis, W. (1986). "Transformative power and leadership". In T.J. Sergiovanni & J.E. Corbally (Eds.), *Leadership and Organisational Culture* (pp. 64-71). Urbana, IL: University of Illinois Press.

Bennis W. & Nanus, B. (1985). *Leaders: The Strategies for Taking Charge.* New York: Harpe & Row.

Bennis, W.G., Benne, K.D., & Chin, R. (1969). *The Planning of Change.* New York: Holt, Rinehart and Winston.

Berry, B. & Ginsberg, R. (1990). "Effective schools, teachers, and principals: Today's evidence, tomorrow's prospects". In B. Mitchell & L.L. Cunningham (Eds.), *Educational*

Leadership and Changing Contexts of Families, Communities and Schools (pp. 155-183). Chicago: The National Society for the Study of Education.

Best, J.W. (1991). *Research in Education* (4th ed.). New Jersey: Englewood Cliffs.

Blake R.R. & Mouton, J.S. (1982) *Theory and research for developing a science of leadership*. The Journal of Applied Behavioural Science, 18(3), 275-291.

Blake,R.R. & Mouton, J.S. (1978). *The New Managerial Grid*. Houston: Gulf Publishing.

Blake R.R. & Mouton, J.S. (1990a). *The New Managerial Grid.* Houston : Gulf Publishing.

Blake R.R. & Mouton, J.S. (1990b). "How power affects human behaviour". In J. Hall (Ed.), *Models for Management: The structure of competence* (2nd ed.) (pp. 113-120). The Woodlands, TX: Woodstead Press.

Blake R.R. & Mouton, J.S. (1990c). "The developing revolution in management practices". In J. Hall (Ed.), *Models for Management: The Structure of Competence* (2nd ed.) (pp. 422-444). The Woodlands, TX: Woodstead Press.

Blanchard, K., Zigarmi, D. & Zigarmi, P. (1987). *Situational Leadership: different strokes for different folks*. Principal, 66, 12-16.

Blasé, J. & Blasé, J.R. (2000). *Effective instructional leadership: Teachers' perspectives on how principals promote teaching and learning in schools*. Journal of Educational Leadership. (38), 2, 130-141.

Block, P. (1993). *Stewardship: Choosing service over Self-interest*. San Francisco: Berrett-Koehler Publishers.

Bloom, B.S., Hasting, J.T. & Madaus, G.R. (1971). *Handbook on Formative and Summative Evaluation and Student Learning*. New York: McGraw Hill.

Bobbit, F. (1918). *The Curriculum*. New York: Houghton Mifflin.

Bobbit, F. (1924). *How to Make a Curriculum*. New York: Houghton Mifflin.

Bohm, D. (1983). *Wholeness and the Implicit Order*. London: ARK Paperbacks.

Brown, Phillip and Lauder, Hugh (1996) *Education, Globalisation and Economic Development*. Journal of Education Policy, 11(1), 1-25.

Burns, J.M. (1978). *Leadership*. New York: Harper & Row.

Burns J.M. (1978). *Principle-centered Leadership*. New York: Simon and Schuster.

Christie (1997). *Globalisation and the curriculum: Education and training.* Kallaway. University of Capetown Press.

Coleman, M. (1994). "Leadership in educational management". In T. Bush and J. West-Burnham (Eds.) *The Principals of Educational Management*. London: Educational Management Development Unit, University of Leicester.

Conley, T. D. and Goldman, P. (1994) *Facilitative leadership: How Principal lead without dominating*. Eugene, OR: Oregon School Study Council.

Conley, T. D. (1993). *Road map to restructuring: Policies, practices, and the emerging visions of schooling.* ERIC, University of Oregon.

Covey, S.R. (1989). *The Seven Habits of Highly Effective People: Restoring the Character Ethic*. New York: Simon and Schuster.

Covey. S.R. (1990). *Principal-centred Leadership*. New York: Simon and Schuster.

Dalin, P. (1998). *School development theories and practice*. London: Cassell.

Davies, B. and Hentschke, G. (1992). "Education reform and teacher involvement in the United States and England". In Simking, T. et. Al. (eds.) *Implementing educational reform: The early lesson.* United Kingdom: Biddles Ltd.

Deal, T. (1987). "Effective School Principals: Counsellors, Engineers, Pawnbrokers, Poets or Instructional Leaders?" In W. Greenfield (Ed.), *Instructional Leadership, Concepts, Issues and Controversies* (pp. 230-246). Boston: Allyn and Bacon.

Deal, T.E. & Kennedy, A.A. (1982). *Corporate Cultures*. New York: Addison Wesley Publishing.

Development Council (1976). *First Five Year Development Plan*. Muscat: Sultanate of Oman

Development Council (1980). *Second Five Year Development Plan*. Muscat: Sultanate of Oman.

Development Council (1985). *Third Five Year Development Plan*. Muscat: Sultanate of Oman

Development Council (1990). *Fourth Five Year Development Plan*. Muscat: Sultanate of Oman.

Doll, RC (1978). *Curriculum Improvement: Decision Making and Process* (4th ed.). Boston: Allyn and Bacon.

Donn, G. (1998). "International Policy Making: Global Discourse and the NQF". In W. Morrow & K. King (Eds.), *Vision and Reality* University of Cape Town Press, Cape Town.

Duignan, P. (1989). "Reflective Management: The key to quality leadership". In C. Riches & C. Morgan (Eds.) *Human Resource Management in Education* (pp. 74-90). Philadelphia: Open University Press.

Easton, D. (1965). *A system analysis of political life*. New York: John Wiley & Sons, Inc.Educational Planning Division, Directorate General of Educational Development (1998). *Annual Statistical Report*. Muscat: Sultanate of Oman: Ministry of Education.

Everard, K. B. & G. Morris. (1996). *Effective School Management* (3rd. ed). London: Paul Chapman Publishing Ltd.

Fagerlind, I. and Saha, L. (1995). *Educational and national development: A comparative perspective*. Oxford: Butterworth Heinemann.

Farhan, I.A. and Associates (1985). *Curriculum Planning and Development* (1st ed.). Muscat: Ministry of Education and Youth, Sultanate of Oman

Farrands C. (1996). "The Globalisation of Knowledge and the Politics of Global Intellectual Property: Power, Governance and Technology". In Kofman, E & Youngs, G. (Eds.) *Globalisation: Theory and Practice*. London: Biddles Limited.

Fiedler, F.E. (1967). A Theory of Leadership Effectiveness. New York: McGraw-Hill.

Firestone, W.A. & Wilson, B.L. (1989). "Using bureaucratic and cultural linkages to improve instruction: The principal's contribution". In J.L. Burdin (Ed.), *School Leadership: A Contemporary Reader* (pp. 275-296). Newbury Park: Sage Publications.

Fisher, B.A. (1978). *Perspectives on Human Communication.* New York: MacMillan Publishing.

French, J. & Raven, B. (1968). "The bases of social power". In D. Cartwright & A. Zander (Eds.), *Group Dynamics: Research and Theory* (pp. 259-269). New York: Harper & Row.

Fullan, M. (1982). *Meaning of Education change.* New York: Teachers' College Press, Columbia University.

Fullan, M. (1992). "Causes/processes of implementation and continuation". In Bennett, N. et al. (Eds.). *Managing change in education: Individual and organizational perspectives.* London: Paul Chapman.

Fullan, M. (1991). *The new meaning of educational change.* London, Eng.: Cassell Educational Limited.

Gardner, J.W. (1990). *On Leadership.* New York: The Free Press.

Gindling, T. H., Marsha Goldfarb & Chun-Chig Chang, (1995) *Changing Returns to Education in Taiwan: 1978-1991.* World Development, 23(2):343-356.

Greenfield, W. (1987). "Moral imagination and interpersonal competence: Antecedents to instructional leadership". In W. Greenfield (Ed.), *Instructional Leadership, Concepts, Issues and Controversies* (pp. 56-73). Boston: Allyn and Bacon.

Greenfield, W. (1987). *Instructional leadership: Concepts, issues, and controversies.* Boston: Allyn & Bacon.

Gultig J. Lubissi, C. Packer B, and Wedeking, V. (1998) *Understanding Outcomes-Based Education* SAIDE, Johannesberg.

Habermas, J. (1971). *Knowledge and Human Interests.* Boston: Beacon Press.

Habermas, J. (1976). *Legitimiation Crisis.* London: Heinemann

Hall, J. (1990). *Models for Management: The Structure of Competence* (2nd ed.). The Woodlands, TX: Woodstead Press.

Hall, V., Mackay, H., & Morgan, C. (1988). "Head-teachers at work: Practice and policy". In R. Glatter (Ed.), *Understanding school management: E325 course reader* (pp. 78-91). London: The Open University.

Harker, R.K. (1975). "Social Class Factors in a New Zealand Comprehensive school". In R. Hooper (Ed.) *The Curriculum: Context, Design and Development.* Edinburgh: Oliver & Boyd, Open University.

Harris, A., Day, C., & Hadfield, M. (2000). *Effective leadership: Challenging the orthodoxy.* Management Education. (14) 1, 9-10,.

Hendirikson R.L. (1989). *Leadership and Culture* (Doctoral dissertation University of San Diego, 1989) Dissertation Abstracts International, 50, 1350A.

Hersey, P. & Blanchard, K.H. (1982). *Leadership style: Attitudes and behaviours.* Training and Development, 36, 5-52.

Hersey, P. & Blanchard, K.H. (1988). *Management of Organisational Behaviour* (5th ed.), Englewood Cliffs, NJ: Prentice-Hall.

Hill and Turner (1984). Belief and/or standards, which are regarded as legitimate and binding, and act as standards by which ends or actions are selected.

Hodgkinson, C. (1983). *The philosophy of leadership.* Basil Blackwood Publishing Co. Ltd. Oxford, England.

House, R.J. (1971). *A path goal theory of leader effectiveness.* Administrative Science Quarterly, 16, 321-339.

House, R & Dessler, G. (1974). "The path-goal theory of leadership: Some post hoc and a priori tests". In J. hunt & L. Larson (Eds.), *Contingency Approaches to Leadership* (pp. 29-55). Carbondale, IL: Southern Illinois Press.

Houseknecht S.E. (1990). *The relationship between perceived leadership behaviour and the morale of elementary classroom teachers.* (Doctoral dissertation, Columbia Teachers College, 1990/91)) Dissertation Abstracts International, 51, 3287A

Hoyle, E. (1988). "Leadership and mission". In R. Glatter (Ed.), *Understanding school management: E325 course reader* (pp.28-44). London: The Open University.

Huenecke, D. (1982). *What is Curriculum Theorising? What are its Implications for Practice?* Educational Leadership, 40(5), 290-294.

Ilon, Lynn (1994). *Structural Adjustment and Education: Adapting to a Growing Global Market.* International Journal of Educational Development. 14(2): 95-108.

Ilon, Lynn (1997). *Confronting the Bully: Regional Education Trends in a Global Economy.* Compare. 27(2): 153-156.

Jamison, Dean T.; Lau, Lawrence J. (1982), *Farmer education and farm efficiency.* Baltimore: Published for the World Bank [by] Johns Hopkins University Press.

Johnson, M. (1967). *Definitions and Models in Curriculum Theory.* Educational Theory, 17(2), 127-140.

Kaplan, A. (1964). *The Conduct of Inquiry.* San Francisco: Chandler.

Kimber C.P. Gordon, H.M. Gibbsons, J.A (1996). *Report on a visit to the Sultanate of Oman.* Unpublished document, Scottish Examination Board.

King K. & Martin, C. (Forthcoming 2001). *The vocational school fallacy revisite.:* Education, Aspitation and Work in Ghana 1959-2000 in International Journal of Educational Development.

King, K. (1998). "Policy coherence in education, training, and enterprise development in South Africa: The implementation challenge of new policies". In Morrow, W. and King, K. (Eds.) (1998). *Vision and reality: Changing education and training in South Africa.* Cape Town, S. Africa: University of Cape Town Press.

Kirk, G. (1991) "The Growth of Central Influence on the Curriculum". In R. Moore & J. Ozga (Eds.) *Curriculum Policy.* Oxford: Pergamon Press.

Kliebard, H.M. (1977). *Curriculum Theory: Give me a "For instance".* Curriculum Inquiry (Summer), 257-268.

Kofman E. and Youngs G. (1996) *Globalisation: Theory and practice*. London:Biddles Limited.

Koestenbaum, P. (1991). *Leadership: The Inner Side of Greatness*. San Francisco: Jossey-Bass publications.

Kouzes, J.M. & Posner, B.Z. (1987). *The Leadership Challenge: How To Get Extraordinary Things Done in Organisations.* San Francisco: Jossey-Bass Publishers.

Kouzes, J.M. & Posner, B.Z. (1993). *Credibility: How Leaders Gain it and Lose it. Why People Demand it.* San Francisco: Jossey-Bass Publishers.

Kraak, Andre (2000) *Changing Modes: New Knowledge Production and Its Implications for Higher Education in South Africa.* Pretoria: Human Sciences Research Council.

Kuhn, T.S.(1962). *The Structure of Scientific Revolutions*. Chicago:University of Chicago Press.

Kuhn, T.S. (1970). *The Structure of Scientific Revolutions*, 2nd ed. Chicago: The University of Chicago Press.

Lambert L (1998). *Building Leadership Capacity in Schools*. Alexandria, VA: Association for Supervision and Curriculum Development.

Lawton, D. (1975). *Class, Culture and the Curriculum*. London: Routledge & Kegan Paul.

Lawton, D. (1983). *Curriculum Studies and Educational Planning*. London: Hodder and Stoughton.

Lawton D. & Chitty, C. (1988) *The National Curriculum*. London: Institute of Education, University of London.

Lee, Maw-Lin, Liu, Ben-Chieh & Wang, Ping, (1994) *Education, Human Capital Enhancement and Economic Development: Comparison Between Korea and Taiwan.* Economics of Education Review, 13(4):275-288.

Leithwood, K. & Jantzi, D. (2000). *The effects of transformational leadership on organisational conditions and student engagement with school.* Journal of Educational Administration. (38) 2. 112-129.

Leithwood, K. & Montgomery C. (1986). *The Principal profile*. Toronto, OISE Press.

Lewin, K., Lippitt, R., & White, R.K. (1939). *Patterns of aggressive behaviour in experimentally created social climates*. Journal of Social Psychology, 10, 271-301.

Lewy A. (Ed.) (1978) *Handbook of Curriculum Evaluation*. Paris UNESCO, International Institute for Education Planning.

Likert, R. (1961). *New Patterns of Management*. New York: McGraw-Hill.

Littlejohn, S. (1992). *Theories of Human Communication* (4th ed.), Belmont, CA: Wadsworth Publishing.

Lunenburg, F.C. & Ornstein, A.C. (1991). *Educational Administration: Concepts and Practices*. Belmont, CA: Wadsworth.

MacDonald, J.B. (1965). "Educational Models for Instruction". In J.B. MacDonald & R.R. Leeper (Eds.), *Theories of Instruction*. Washington, DC: Association for Supervision and Curriculum Development.

MacDonald, J.B. (1978). "Curriculum Theory". In J.R. Gress & D.E. Purpel (Eds.), *Curriculum: An Introduction to the Field* (pp. 44-56). Berkeley, CA: McCutchan.

Maeroff G. I. (1993). *Building Teams to Rebuild Schools*. Phi Delta Kappan, 74,512-519.

Marshall, R. & Tucker, M. (1992). *Thinking of a living: Education and the Wealth of Nations*. New York: Basic Books

Matthews P.et.al. (1998). *Reviewing the work of the schools: A consultancy report for the Sultanate of Oman*. Unpublished document, Office for Standards in Education in Education London, England.

McGregor, D. (1960). *The human side of enterprise*. New York: McGraw-Hill.

McGregor, D. (1990b). "Theory Y: The integration of individual and organisational goals". In J. Hall (Ed.), *Models of Management: The Structure of Competence* (2nd ed.) (pp. 19-27). The Woodlands, TX: Woodstead Press.

McNeill, J. (1985). *Curriculum: A Comprehensive Introduction* (3rd ed.).Boston: Little and Brown.

Measor, L. (1985). "Interviewing: A strategy in quantitative research". In Burgess, R.G. (Ed.), *Strategies of Educational Research: Qualitative Methods*. London: The Falmer Press.

Mertz, R.A. (1972). *Education and Manpower in the Arabian Gulf.* Friends of the Middle East, Beirut.

Merritt, R. L. and Coombs, F. S. (1977). *Politics and educational reform.* Comparative Educational Review. (21) 242-273.

Ministry of Development and Planning. (1995). *2020: Vision for Oman's economy.* Ministry of Development and Planning, Sultanate of Oman.

Ministry of Education (2000). *Educational Statistical Year Book.* Muscat: Sultanate of Oman.

Ministry of Education (July 1999). *Basic Education in the Sultanate of Oman. The Theoretical Framework.* Muscat: Sultanate of Oman.

Ministry of Education (1999). *Statistical Yearbook.* Muscat: Sultanate of Oman.

Ministry of Education (1998). *Statistical Yearbook.* Muscat: Sultanate of Oman.

Ministry of Education (1997). *Statistical Yearbook.* Muscat: Sultanate of Oman.

Ministry of Education (June 1996). *Consultancy Study of Management and Organisational Structure.* Muscat: Sultanate of Oman. (In Arabic and English).

Ministry of Education (1996). *Five Year Plan .*

Ministry of Education (1996). *Statistical Yearbook.* Muscat: Sultanate of Oman.

Ministry of Education (1995). *Reform and Development of General Education.* Muscat: Sultanate of Oman.

Ministry of Education (1994). *Statistical Yearbook.* Muscat: Sultanate of Oman.

Ministry of Education (1992). *Statistical Yearbook.* Muscat: Sultanate of Oman.

Ministry of Education (1978). The Philosophy of Education in the Sultanate of Oman. Muscat: Sultanate of Oman. (In Arabic and English).

Ministry of Education and Youth (1985). *The History of Education in Oman: Overview.* Muscat. Sultanate of Oman.

Ministry of Education (1984). *Statistical Yearbook.* Muscat: Sultanate of Oman.

Ministry of Information (1987). *Oman '87.* Muscat: Sultanate of Oman. (In Arabic and English).

Morais, Richard C. (2000, November 27) *The Colour of Beauty :How do you make consumer brands work overseas?* Forbes

Moroz R. & Waugh R.F. (2000) *Teacher receptivity to system–wide educational change.* Journal of Educational Administration 38 (2) 159-178.

Musgrove, F. (1975) "Curriculum Objectives". In R. Hopper (Ed.) *The Curriculum: Context, Design and Development.* (pp. 216-231) Edinburgh: Oliver & Boiyd, Open University,

Nebecker, D. Mitchell, T. (1974). *Leader behaviour: An expectancy theory approach.* Organisational Behaviour and Human Performance, 11, 355-367.

Nias, J. (1980). "Leadership styles and job satisfaction in primary schools". In T. Bush, R. Glatter, J. Goodey, & C. Riches (Ed.), *Approaches to School Management.* London: The Open University.

Nias, J. (1986). "Leadership styles and job satisfaction in primary schools". In T. Bush, (Ed.), *Approaches to School Management.* London: Harper and Row.

Nonaka, Ikujiro and Noboru Konno (1998) *The Concept of "ba": Building a Foundation for Knowledge Creation.* California Management Review. 40(3):40-54.

Oliva, P.F. (1982). *Developing the Curriculum.* Boston: Little, Brown, and Company.

Oliver, A. (1977). *Curriculum Improvement* (2nd ed.). New York: Harper Row.

Ornstein, A.C. & Hunkins, F.P. (1988). *Curriculum: Foundations, Principles and Issues.* Englewood Cliffs, NJ: Prentice Hall.

Osborn, R. & Hunt, J. (1975). "An adaptive-reactive theory of leadership: The role of macro variables in leadership research". In J. Hunt & L. Larson (Eds.), *Leadership Frontiers.* Kent, OH: Kent State University Press.

Osman, M.K. (1994). *A model for curriculum evaluation: The experience of the Sultanate of Oman* . Unpublished document

Patton, M.Q. (1990). *Qualitative Evaluation and Research Methods* (2nd ed.) Newbury Park, London: Sage.

Paulston, R. (1976). *Conflicting theories of social and educational change: A typological review.* Pittsburg: University Centre for International Studies

Paulston, R. (1983). "Conflicting theories of educational reform". In Simmons, Johns (eds) *Better Schools: International lessons for reform.* New York: Praeger Publishers.

Pellerin H.(1996) "Global Restructuring and International Migration: Consequences for the Globalisation of Politics". In E. Kofman & G. Youngs (Eds.) *Globalisation Theory and Practice* London: Biddles Limited.

Peterson V.S. (1996) "Shifting Ground(s): Epistemological and Territorial Remapping in the Context of Globalisation(s)". In E. Kofman & G. Youngs (Eds.) *Globalisation Theory and Practice.* London: Biddles Limited.

Pinar, W. (1978). *Notes on the Curriculum Field.* Educational Researcher, 7(8), 5-12.

Provus, M. (1971). *Discrepancy Evaluation.* Berkely, CA: McCutchan Publishing.

Qubain, F.I. (1966). *Education and Science in the Arab World.* Baltimore, MD, John Hopkins Press.

Razik T. A. & A. D. Swanson (2000). *Fundamental Concepts of Educational Leadership* (2nd ed.) Upper Saddle River, N.J. Prentice-Hall, Inc.

Razik, Taher et al. (1989). *Evaluation of Curriculum: The Case of Oman, Secondary Level Parts I and II.* Muscat: Ministry of Education, Sultanate of Oman.

Razik, Taher et al. (1988). *Evaluation of Curriculum: The Case of Oman, Preparatory Level Parts I and II.* Muscat: Ministry of Education, Sultanate of Oman.

Razik, Taher et al. (1987). *Evaluation of Curriculum: The Case of Oman, Primary Level, Parts I and II.* Muscat: Ministry of Education, Sultanate of Oman.

Razik, T.A. (1974). *Infrastructure of Curriculum Development: Representative Models: The Case of the United States and its Implications for the Arab Countries.* Paper presented by invitation UNESCO Regional Office of Education in the Arab Countries.

Reich, Robert (1991) *The World of Nations: Preparing Ourselves for 21st Century Capitalism.* New York: Vintage Books.

Reitzug, U.C. (1994). *A case study of empowering principal behaviour.* American Educational Research Journal, 31, 283-307.

Ribbins, P. (1988). "The role of the middle manager in the secondary school". In R. Glatter (Ed.), *Understanding school management: E325 course reader* (pp. 58-77). London: The Open University.

Robson, C. (1996). *Real World Research: A Resource for Social Scientists and Practitioner Researchers.* Oxford: Blackwell.

Rost, J.C. (1991). *Leadership for the Twenty-first Century.* New York: Praeger Publishers.

Ryan K. & L.M. Copper (2001). *Kaleidoschope: Readings in Education* (9th ed.) Boston: Houghton Mifflin Company.

Sack, R. (1981). *A typology of educational reform.* Prospects: (XI) I, 39-53.

Sashkin, M. (1988). *The Visionary Leaders. King of Prussia.* PA: Organisation Design and Development.

Sashkin, M. & Sashkin, M. (1990). *Leadership and Culture Building in School: Quantitative and Qualitative Understandings.* Paper presented at the annual meeting of the American Educational Research Association, Boston.

Sashkin, M. & Walberg, H.J. (1993). *Educational Leadership and School Culture. Berkeley, CA:McCutchan Publishing.*

Saylor, J.G., Alexander, W.M. & Lewis, A.J. (1981). *Curriculum Planning for Better Teaching and Learning* (4th ed.). New York: Holt, Rinehart and Winston.

Schein, E.H. (1985). *Organisational Culture and Leadership, A Dynamic View.* San Francisco: Jossey-Bass.

Schubert, W.H. (1986). *Curriculum: Perspective, Paradigm and Possibility.* New York: Macmillan.

Schwab, J.J. (1969). *The Practical: A Language for Curriculum.* School Review, 78, 1-23.

Schwab, J.J. (1970). *The Practical: A Language for Curriculum.* Washington, D.C.: National Education Association.

Scriven, M. (1967). *The Methodology of Evaluation.* AERA Monograph Series on Curriculum Evaluation, No. 1. Chicago: Rand McNally.

Scholte, Jan Aart (2000) *Globalisation: A Critical Introduction.* New York: Palgrave.

Schultz, T. Paul, (1989), *Returns to Women's Education.* PHRWD Background Paper 89/001, World Bank: Washington, D.C.

Senge, P.M. (1990). *The leader's new work: Building learning organisations.* Sloan Management Review Reprint Series, 32(1).

Sergiovanni, T.J. (1984). *Leadership and excellence in schooling.* Phi Delta Kappan,

41,4-13.

Sergiovanni, T.J. (1986). "Leadership as cultural expression". In T.J. Sergiovanni & J.E. Corbally (Eds.), *Leadership and Organisational Culture* (pp. 105-114). Urbana, IL: University of Illinois Press.

Sergiovanni, T.J. (1992). *Moral Leadership: Getting to the Heart of School Improvement.* San Francisco: Jossey-Bass Publishers.

Sergiovanni, T.J. (1994). *Building Community in Schools.* San Francisco: Jossey-Bass Publishers.

Shetty, Y. (1978). *Managerial Power and organisational effectiveness: A Contingency analysis.* The Journal of Management Studies, 15, 176-186.

Short, P.M. & Greer, J.T. (1997). *Leadership in empowered schools: Themes from innovative efforts.* Upper Saddle River, N.Y.: Merrill.

Skilbeck, M. (1990) Curriculum Reform: An Overview of Trends. Paris: Centre for Educational Research and Innovation.

Skalbeck, K.L. (1991) *Profile of a Transformation Leader: A Sacred Mission.* (Doctoral Dissertation, University of San Diego, 1991). Dissertation Abstracts International, 52,1167A

Smith, B.O., Stanley, W.O. & Shores, J.H. (1957). *Fundamentals of Curriculum Development.* Rev. ed.). New York: Harcourt, Brace, Jovanovich.

Smith, E.C. & Piele, P.K. (Ed.), (1989). *School Leadership: Handbook for Excellence* (2nd ed.). Eugene, OR: ERIC Clearinghouse on Educational Management, University of Oregon.

Smith, E.C. & Piele, P.K. (Ed.). (1997). *School Leadership: Handbook for Excellence* (3rd ed.). Eugene, OR: ERIC Clearinghouse on Educational Management, University of Oregon.

Smith, S.C. & Scott, J.J. (1990). *The collaborative school.* Eugene, OR: ERIC Clearinghouse on Educational Management.

Smith, P.B. & Peterson, M.F. (1989). *Leadership, Organisations and Culture: An Event Management Model.* London: Sage Publications.

Smith, W.F. & Andrews, R.L. (1989) *Instructional Leadership: How Principals Make A difference.* Alexandria, VA: Association for Supervision and Curriculum Development.

Snow, RE. (1973). "Theory Construction for Research on Teaching". In R. M. Travers (Ed.), *Second Handbook of Research on Teaching* (p.78). Chicago: Rand McNally.

Spybey T. (1996) *Globalisation and World Society*, Oxford, U.K. Blackwell Publisher.

***SPSS for Windows (Version 6.1.3)* [Computer Software] (1995).** Chicago, IL: SPSS, Inc.

Stake, R. (1969) "Language, rationality, and assessment". In Peatty, Witt (eds) *Improving educational assessment: An inventory of measures of affective behaviour.* Washington D.C. Association for Supervision and Curriculum Development.

Stehr, N. (1994) *Knowledge Societies.* London: Sage Publications.

Stufflebeam, D.L. (1971). *Education Evaluation and Decision Making.* Itasca, IL: F.E. Peacock.

Tabachnick, B.G. & Fidel, L.S. (1996). *Using multivariate statistics (3rd ed.).* New York: Harper Collins.

Taba, H. (1962) *Curriculum Development: Theory and Practice.* New York: Harcourt, Brace, Jovanovich.

Tannebaum, R. & Schmidt, W. (1973). *How to choose a leadership pattern.* Harvard Business Review, 51, 162-180.

Taylor, P.J. (1975). "Purpose and Structure in the Curriculum". In R.Hooper (Ed) *The Curriculum: context, Design and Development.* (pp153-117) Edinburgh. Oliver & Boyd, Open University.

Taylor, P.J. (1996) "The Modern Multiplicity of States". In E. Kofman & G. Youngs (Ed.) *The Curriculum: Context, Design and Development.* Edinburgh: Oliver & Boyd, Open University.

Tukey, J.W. (1977). *Exploratory data analysis.* Reading, MA: Addison-Wesley.

Tyler R.W. and Oliva, P.F. (1982). *Developing the Curriculum.* Boston: Little, Brown & Company.

Tyler, R.W. (1949). *Basic Principles of Curriculum and Instruction.* Chicago: University of Chicago Press.

UNESCO (1998) *World Education Report*

Vroom, V. & Jago, A. (1988). *The New Leadership: Managing Participation in Organisations.* Englewood Cliffs, NJ: Prentice Hall.

Vroom, V. & Yetton, P. (1973). *Leadership and Decision Making.* Pittsburgh: University of Pittsburgh Press.

Walker, A. & Dimmock, C. (2000). *Mapping the way ahead: Leading educational leadership into the globalised world.* School leadership and management, 20(2), 227-233.

Weber, J.R. (1989). "Leading the instructional program". In E.C. Smith & P.K. Piele (Eds.), *School Leadership: Handbook for Excellence* (2nd ed.) (pp. 191-224). Eugene, OR: ERIC Clearinghouse on Educational Management, University of Oregon.

Weindling, D. & Earley, P. (1988). "How heads manage change". In R. Glatter (Ed.), *School Management and Organisation*, (pp. 92-104). Guilford, GB: Biddles Ltd.

Wheatley, M.J. (1992). *Leadership and the New Science: Learning about Organisation from and Orderly Universe*. San Francisco: Berrett-Koehler Publishers.

White, R. & Lippitt, R. (1990). "Leader behaviour and member reaction in three 'social climates'". In J. Hall (Ed.), *Models for Management: The Structure of Competence* (2nd ed.), (pp. 146-172). The Woodlands, TX: Woodstead Press.

Wilcoxon, F. (1945). *Individual comparisons by ranking methods*. Biometrics, 1, 80-83.

Wilcoxon, F. (1947). *Probability tables for individual comparisons by ranking methods*. Biometrics, 3, 119-122.

Wilson, L.C. (1971). *The Open Access Curriculum*. Boston: Allyn and Bacon.

Wood, Adrian (1994) *North-South Trade, Employment and Inequality: Changing Fortunes in a Skill-Drive World*. New York: Oxford University Press.

World Bank, (1990) *World Development Report,1990: Poverty*. World Bank: Washington, D.C.

World Bank, (2001) *The Sultanate of Oman cost effectiveness study for the education sector*. World Bank: Washington, D.C.

Yukl, G.A. (1989). *Leadership in Organisations*. Englewood Cliffs, NJ: Prentice Hall.

Yukl, G.A. (1994). *Leadership in Organisations*. (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.

Zias (1976). *Curriculum principles and foundations*. New York: Harper & Row.

Appendix One

DEPARTMENT *of* EDUCATION *and* SOCIETY

The University of Edinburgh
4-12 Buccleuch Place
Edinburgh EH8 9JT

Fax 0131 667 4335

Telephone 0131 650 1000

or direct dial 0131 650 4332

Dear Teacher

One of our graduate students is conducting a research project as part of the requirements of his PhD from this University.

The main issue of his research is to delineate administrative approaches to educational innovations in the Sultanate of Oman. He will be focusing on the perceptions of both Principals and teachers from the secondary school system towards leadership behaviour and will examine the dynamics which foster a culture of collaboration amongst staff.

The University of Edinburgh would be extremely grateful if you would participate in this research by responding to the enclosed questionnaire.

I would like to thank you in anticipation of your support for this work.

Yours sincerely,

Dr Gari Donn and Prof Kenneth King
Supervisors

Appendix One

DEPARTMENT *of* EDUCATION *and* SOCIETY

The University of Edinburgh
4-12 Buccleuch Place
Edinburgh EH8 9JT

Fax 0131 667 4335

Telephone 0131 650 1000

or direct dial 0131 650

Dear Principal

One of our graduate students is conducting a research project as part of the requirements of his PhD from this University.

The main issue of his research is to delineate administrative approaches to educational innovations in the Sultanate of Oman. He will be focusing on the perceptions of both Principals and teachers from the secondary school system towards leadership behaviour and will examine the dynamics which foster a culture of collaboration amongst staff.

The University of Edinburgh would be extremely grateful if you would participate in this research by responding to the enclosed questionnaire.

I would like to thank you in anticipation of your support for this work.

Yours sincerely,

Dr Gari Donn and Prof Kenneth King
Supervisors

Appendix One

DEPARTMENT *of* EDUCATION *and* SOCIETY

The University of Edinburgh
4-12 Buccleuch Place
Edinburgh EH8 9JT

Fax 0131 667 4335
Telephone 0131 650 1000
or direct dial 0131 650

جامعة ادنبره

كلية التربية

قسم التربية والمجتمع

الفاضل/	مدير/ مديرة المدرسة	المحترم
الفاضل/	عضو هيئة التدريس	المحترم

يقوم أحد طلابنا بالإعداد لمشروع بحث كمتطلب للحصول على درجة الدكتوراه من جامعة ادنبره بالمملكة المتحدة .

أن الموضوع الأساسي لهذا البحث هو التعرف على الأساليب الإدارية المتبعة وعلاقتها بالتجديدات التربوية في سلطنة عمان . سوف يركز الباحث على رأي كل من مدير المدرسة وعضو هيئة التدريس في المدارس الثانوية حول القيادة الإدارية للمدير / المديرة . كما سوف يبحث الآليات التي تدعم التعاون بين أعضاء هيئة التدريس .

أن جامعة ادنبره تتقدم إليكم بعظيم الامتنان والتقدير على مساهمتكم في الإجابة على هذا الاستبيان .

ونشكركم على دعمكم وتعاونكم لانجاح هذا المشروع .

مخلصكم

د. جاري دون

البرفسور كيث كنج

Appendix Two

Principal Leadership Survey (P.L.S.)-- Self

Please read each of the following statements carefully, then rate ***yourself*** in terms of ***how frequently*** you engage in the practice described. Record your answers by circling the letter that corresponds to the frequency you have selected.

You are given five choices:

1. If you **RARELY** or **NEVER** do what is described in the statement, circle the letter **A.**
2. If you do what is described **ONCE IN A WHILE**, circle the letter **B.**
3. If you **SOMETIMES** do what is described, circle the letter **C.**
4. If you do what is described **FAIRLY OFTEN**, circle the letter **D.**
5. If you do what is described **VERY FREQUENTLY** or **ALWAYS,** circle the letter **E.**

In selecting your answers, be realistic about the extent to which you actually engage in each behaviour. Do not answer in terms of how you *would like* to see yourself or in terms of what you *should* be doing.

Answer in terms of how you *typically behave.* For example, if you believe you stay current on the most recent developments affecting your school *fairly often*, circle the letter **D.** If you believe you stay current on the most recent developments affecting your school *once in a while*, circle the letter **B.**

Please remember that there are no right or wrong answers, what is needed is your thoughtful assessment of each item in the survey.

The teaching staff in your school will also complete the Principal Leadership Survey -- Other. Their responses will be treated confidentially. However, your name will not appear in any of the survey questionnaire distributed to the teachers in your school.

School District
Please complete the following items.

1. Age *(Please indicate number.)*: _____

2. Sex *(Check one.)*: ☐ Female ☐ Male

3. Nationality ☐ Omani ☐ non-Omani

4. Number of years in administrative position(s) _____ Years
   (Please indicate number.)

5. Number of years as principal of present school. _____ Years
   (Please indicate number.)

6. Year in which teaching certificate was obtained _____

7. Year in which administration certification was obtained _____

8. Highest level of education attained. (*Check one.*)

   ☐ Teacher training institute diploma

   ☐ Intermediate college for teacher training diploma

   ☐ Bachelor's degree in education

   ☐ Bachelor's degree other than education

   Please indicate area of specialization _____

   ☐ General diploma in education

   ☐ Master's degree in education

   ☐ Administrative certificate program

   ☐ Other degree _____
   (Please specify.)

Circle the letter that describes to what extent you believe you engage in the following actions and behaviours.

		Rarely	Once in a While	Sometimes	Fairly Often	Very Frequently
1.	I ensure that policies, rules and procedures reflect the values and mission of the school.	**A**	**B**	**C**	**D**	**E**
2.	I spend time and energy to ensure that teachers develop a commonly held set of values.	**A**	**B**	**C**	**D**	**E**
3.	I show teachers how their personal success can become reality by participating in the reform's success.	**A**	**B**	**C**	**D**	**E**
4.	I give teachers support for their efforts.	**A**	**B**	**C**	**D**	**E**
5.	I positively contribute to the implementation of teacher group's action plans and projects.	**A**	**B**	**C**	**D**	**E**
6.	I encourage teachers to feel good about their professional accomplishments.	**A**	**B**	**C**	**D**	**E**
7.	I treat others with dignity and respect.	**A**	**B**	**C**	**D**	**E**
8.	I share current educational information and practices with teachers.	**A**	**B**	**C**	**D**	**E**
9.	I keep informed of innovations in teaching and learning.	**A**	**B**	**C**	**D**	**E**
10.	I base reform decisions on evidence obtained through experience and collaborative discussion with colleagues.	**A**	**B**	**C**	**D**	**E**

		Rarely	Once in a While	Sometimes	Fairly Often	Very Frequently
11.	I inform teachers of my beliefs on how to effectively run this school.	A	B	C	D	E
12.	I describe the kind of future I would like us to create together for this school.	A	B	C	D	E
13.	I encourage teachers to think about old problems in new ways (with a new perspective).	A	B	C	D	E
14.	I clearly communicate a positive, hopeful outlook for the implementation of the reform.	A	B	C	D	E
15.	I encourage teachers to share their positive attitudes towards education reform efforts.	A	B	C	D	E
16.	I refer to the school's academic goals when talking informally with teachers.	A	B	C	D	E
17.	I involve teachers in planning actions that are taken to implement reform efforts.	A	B	C	D	E
18.	I display actions that reflect my philosophy of education.	A	B	C	D	E
19.	I ensure that teachers set clear goals, make plans, and establish milestones for the reform efforts they undertake.	A	B	C	D	E
20.	I involve teachers in decisions that affect classroom practices.	A	B	C	D	E

		Rarely	Once in a While	Sometimes	Fairly Often	Very Frequently
21.	I believe the school's curriculum committee makes a significant contribution to the school.	A	B	C	D	E
22.	I look for innovative ways to improve what we do.	A	B	C	D	E
23.	I enrol in in-service programs so that I can improve performance in the classroom.	A	B	C	D	E
24.	I challenge the way we do things.	A	B	C	D	E
25.	I work to secure intangible resources (time, opportunities) for teachers who are working on reform projects.	A	B	C	D	E
26.	I tell stories about outstanding achievements of students or teachers which exemplify the importance of the school's reform actions.	A	B	C	D	E
27.	I use knowledge obtained through experience and collaborative discussion with colleagues to inform curriculum decisions.	A	B	C	D	E
28.	I experiment and take risks with new approaches in my work even if there is a chance of failure.	A	B	C	D	E
29.	I direct attention to unnoticed aspects of the school environment.	A	B	C	D	E
30.	I express my appreciation when others do a good job.	A	B	C	D	E
31.	I apply policies, rules, and regulations uniformly.	A	B	C	D	E

		Rarely	Once in a While	Sometimes	Fairly Often	Very Frequently
32.	I get teachers to develop a sense of ownership for the projects they undertake.	A	B	C	D	E
33.	I analyse the relationship between student performance and test results of student achievement.	A	B	C	D	E
34.	I break down activities I manage into achievable, manageable tasks.	A	B	C	D	E
35.	I keep up to date about new policies issued by the Ministry and Regional District that have an impact on our school.	A	B	C	D	E
36.	I consistently practice the values that I believe in.	A	B	C	D	E
37.	I consider students' successful academic performance as my prime responsibility.	A	B	C	D	E
38.	I communicate my confidence in the abilities of teachers to achieve reform efforts.	A	B	C	D	E
39.	I develop co-operative relationships among teachers.	A	B	C	D	E
40.	I show concern for teaching conditions by meeting with teachers to revise undesirable conditions.	A	B	C	D	E
41.	I look ahead and forecast what I believe the future will be like.	A	B	C	D	E
42.	I create mutual trust among teachers working on instructional problems.	A	B	C	D	E

Now, Please, Check that you have answered "EVERY QUESTIONS"

Please Turn Over

Please accept my thanks for taking the time to complete the survey questionnaire.

We will appreciate if you take a few minutes to make some comments relevant to this survey in case we have missed something important especially you could give us your personal views about how the Reform has been implemented in your school and what have been the changes which that school made because of the Reform.

Any views which you will express will help this survey will be confidential, and will be used for the survey purpose only

Make your comments here :-

Appendix Two

مسح الأنشطة القيادية لمدراء المدارس .. ذاتي

يرجى قراءة العبارات التالية بعناية ، ثم قم بوضع تقديرات عن عدد مرات مشاركتك في الأنشطة الوارد وصفها . يمكن تسجيل إجاباتك بوضع دائرة على الحرف الذي يتفق مع عدد المرات التي قمت باختيارها .

لديك خمسة اختيارات على النحو التالي :

١- يرجى وضع دائرة على الحرف أ إذا كنت **نادراً جداً** ما تقوم أو لا تقوم على الإطلاق بما ورد وصفه في العبارة .

٢- يرجى وضع دائرة على الحرف ب إذا كنت **نادراً ما** تقوم بما ورد وصفه في العبارة.

٣- يرجى وضع دائرة على الحرف ج إذا كنت تقوم بذلك النشاط **أحياناً** .

٤- يرجى وضع دائرة على الحرف د إذا كنت تقوم بذلك النشاط **كثيراً إلى حد ما**.

٥- يرجى وضع دائرة على الحرف هـ إذا كنت تقوم بذلك النشاط **كثيراً أو دائماً**.

يرجى أن تكون واقعياً عند اختيارك للإجابات وذلك من حيث مدى مشاركتك الفعلية في كل نشاط ، كما يرجى ألاّ تكون إجابتك من حيث الكيفية التي ترغب أن تكون عليها أو ما يجب أن تقوم بأدائه .

كما يرجى أن تكون إجابتك من حيث تصرفك على نحو نموذجي ، فعلى سبيل المثال إذا كنت تعتقد بأنك تقوم بمجاراة معظم التطورات الحالية التي تؤثر على مدرستك كثيراً إلى حد ما ، عليه يرجى وضع دائرة على الحرف د . أما إذا كنت تعتقد بأنك تقوم بمجاراة معظم التطورات الحالية التي تؤثر على مدرستك في حالات نادرة عليه يرجى وضع دائرة على الحرف ب .

تذكر بأنه ليس هناك إجابات صحيحة أو خطأ ، وإنما المطلوب هو تقييمكم بعناية لكل بند وارد في هذا المسح .

علماً بأن معلمي مدرستكم سوف يقومون بالإجابة على مسح الأنشطة القيادية لمدراء المدارس وإن إجاباتهم سوف تعامل بسرية .

Appendix Two

المنطقة التعليمية :

يرجى استكمال البيانات التالية :

١- العمر (يرجى كتابة عدد السنوات) : _____

٢- الجنس (يرجى وضع علامة (✓) على المربع الملائم) : ذكر ( ) أنثى ( ) .

٣- الجنسية : عماني ( ) غير عماني ( ) .

٤- عدد سنوات الخدمة في وظيفة (وظائف) إدارية : _____ سنة .

٥- عدد سنوات توليكم مديراً للمدرسة الحالية : _____ سنة .

٦- سنة الحصول على شهادة التدريس : _____ .

٧- سنة الحصول على شهادة الإدارة : _____ .

٨- المستوى العالي من التعليم الذي تم إحرازه (يرجى وضع علامة (✓) على المربع الملائم :

- ☐ دبلوم معهد تدريب المعلمين .
- ☐ دبلوم الكلية المتوسطة لتدريب المعلمين .
- ☐ بكالوريوس التربية .
- ☐ درجة البكالوريوس بخلاف التربية .

يرجى توضيح مجال التخصص _____ .

- ☐ دبلوم عام في التربية .
- ☐ ماجستير التربية .
- ☐ شهادة برنامج إداري .
- ☐ درجات أخرى _____ .

Appendix Two

يرجى وضع دائرة على الحرف الذي يوضح مدى مشاركتك في الأنشطة والأعمال التالية :

م	العبـــــــــارة	مدى المشاركة				
		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
١	أتأكد بأن السياســات والقواعــد والإجــراءات تعكس قيم ومهام المدرسة .	أ	ب	ج	د	هـ
٢	أبذل جهدي ووقتي للتأكــد مــن أن المعلمــين يطورون مجموعة من القيم العامة المكتسبة .	أ	ب	ج	د	هـ
٣	أوضح للمعلمين بأن نجاحهم الشخصي يمكــن أن يصبح واقعي من خلال مشاركتهم في نجاح عملية التطوير .	أ	ب	ج	د	هـ
٤	أدعم جهود المعلمين .	أ	ب	ج	د	هـ
٥	أشارك بطريقة إيجابيــة في تنفيــذ خطــط عمــل ومشاريع مجموعات المعلمين .	أ	ب	ج	د	هـ
٦	أشجع المعلمين على الشعور بارتياح تجاه ما حققوه من إنجازات مهنية .	أ	ب	ج	د	هـ
٧	أتعامل مع الآخرين بكل تقدير واحترام .	أ	ب	ج	د	هـ
٨	أتبادل مع المعلمين أحدث المعلومات عن التعلــيم والممارسات التربوية .	أ	ب	ج	د	هـ
٩	أظل على اطلاع بطرق التدريس والتعليم الجديدة.	أ	ب	ج	د	هـ
١٠	أبني قرارات التطوير على الأدلة المكتســبة مــن خلال الخبرة والمناقشات المشتركة مع الزملاء .	أ	ب	ج	د	هـ
١١	أبلغ المعلمين بآرائي حــول كيفيــة إدارة هــذه المدرسة.	أ	ب	ج	د	هـ
١٢	أصف نوعية المستقبل الذي أرغب بأن نشترك مع بعضنا البعض في إحداثه بهذه المدرسة .	أ	ب	ج	د	هـ

Appendix Two

م	العبـــــــــارة	مدى المشاركة				
		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
١٣	أشجع المعلمين على التفكير في المشاكل القديمة بطرق حديثة (بمنظور جديد) .	أ	ب	ج	د	هـ
١٤	أتبادل بوضوح وجهات النظر الإيجابية والمليئة بالأمل وذلك فيما يتعلق بتنفيذ عملية التطوير .	أ	ب	ج	د	هـ
١٥	أُشجع المعلمين على تبادل مواقفهم الإيجابية تجاه الجهود المبذولة لتطوير التعليم .	أ	ب	ج	د	هـ
١٦	أتطرق للأهداف الأكاديمية للمدرسة عند التحدث مع المعلمين بطريقة غير رسمية .	أ	ب	ج	د	هـ
١٧	أشرك المعلمين في تخطيط الإجراءات التي يتم اتخاذها من أجل تنفيذ جهود التطوير .	أ	ب	ج	د	هـ
١٨	أعرض الإجراءات التي تعكس فلسفتي الخاصة بالتعليم .	أ	ب	ج	د	هـ
١٩	أتأكد من قيام المعلمين بوضع أهداف وخطط واضحة وأعمال مميزة عند تنفيذهم لجهود التطوير .	أ	ب	ج	د	هـ
٢٠	أشرك المعلمين في القرارات التي تؤثر على مزاولة العمل في الصف .	أ	ب	ج	د	هـ
٢١	أرى بأن لجنة المنهج بالمدرسة تقدم مساهمات كبيرة للمدرسة .	أ	ب	ج	د	هـ
٢٢	أتطلع لطرق جديدة لتحسين ما نقوم بعمله .	أ	ب	ج	د	هـ
٢٣	أشارك في برامج التدريب أثناء الخدمة حتى أتمكن من تحسين الأداء داخل الصف .	أ	ب	ج	د	هـ

Appendix Two

م	العبـــــــــارة	مدى المشاركة				
		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
٢٤	أضع تحديات لطرق إنجاز الأعمال .	أ	ب	ج	د	هـ
٢٥	أعمل على تأمين الموارد غير الملموسة (الوقت والفرص) للمعلمين العاملين في مشاريع التطوير .	أ	ب	ج	د	هـ
٢٦	أروي قصص عن الإنجازات الرائعة للتلاميذ أو المعلمين والتي في حد ذاتها تعتبر مثالاً يحتذى به فيما يتعلق بأهمية إجراءات التطوير في المدرسة .	أ	ب	ج	د	هـ
٢٧	استخدم المعرفة المكتسبة من خلال الخبرة والمناقشات المشتركة مع الزملاء للإبلاغ عن القرارات المتعلقة بالمنهج .	أ	ب	ج	د	هـ
٢٨	أجرب الطرق الجديدة والعزم على تنفيذها في مجال العمل حتى ولو كان هناك احتمال الفشل .	أ	ب	ج	د	هـ
٢٩	أوجه اهتمامي للجوانب غير المرئية في بيئة المدرسة .	أ	ب	ج	د	هـ
٣٠	أعبر عن إعجابي وتقديري عندما يقوم الآخرين بأداء العمل بطريقة جيدة .	أ	ب	ج	د	هـ
٣١	أطبق السياسات والقوانين واللوائح بطريقة منتظمة .	أ	ب	ج	د	هـ
٣٢	أبعث في المعلمين الشعور بأنهم أصحاب هذه المشاريع التي يقومون بتنفيذها .	أ	ب	ج	د	هـ
٣٣	أحلل العلاقة بين أداء التلميذ ونتائج امتحاناته .	أ	ب	ج	د	هـ
٣٤	أقسّم الأنشطة التي أديرها إلى مهام ممكن إنجازها وأخرى يمكن إدارتها .	أ	ب	ج	د	هـ

		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
٣٥	أظل على اطلاع بالسياسات الجديدة التي تؤثر على مدرستنا والصادرة من الوزارة والمنطقة التعليمية .	أ	ب	ج	د	هـ
٣٦	أمارس باستمرار القيم التي أؤمن بها .	أ	ب	ج	د	هـ
٣٧	أعتبر نجاح التلاميذ أكاديمياً من مسئولياتي الرئيسية .	أ	ب	ج	د	هـ
٣٨	أُعبر عن ثقتي في قدرات المعلمين على تحقيق التطوير المنشود .	أ	ب	ج	د	هـ
٣٩	أعمل على تطوير علاقات التعاون بين المعلمين .	أ	ب	ج	د	هـ
٤٠	أُبدي اهتمامي بأوضاع التدريس من خلال الاجتماع بالمعلمين لمراجعة الأوضاع غير المرغوب فيها .	أ	ب	ج	د	هـ
٤١	أُفكر في المستقبل وأتنبأ بما سيكون عليه .	أ	ب	ج	د	هـ
٤٢	أقوم بإيجاد ثقة متبادلة بين المعلمين الذي يقومون بمعالجة مشاكل التدريس .	أ	ب	ج	د	هـ

يرجى التأكد أنك قد أجبت على جميع الأسئلة

أرجو النظر إلى خلف الصفحة

Appendix Two

أرجو قبول شكري وتقديري على الوقت الذي بذلتموه في تكملة الاستبيان .

سنكون ممتنين لو قمتم بأخذ بعض الوقت للتعليق وإضافة ما ترونه مناسباً ويســـاهم في أهداف البحث خاصة ما يتعلق في الخطوات التي تم اتخاذها في مدرستكم لتنفيذ تطوير التعليم .

أية آراء تودون إيضاحها ستعامل بسرية وستستخدم لغرض البحث فقط .

الباحث

الرجاء عمل ملاحظاتكم في هذه الصفحة :

Appendix Two

Principal Leadership Survey (P.L.S.)-- Teachers

Please read each of the following statements carefully, then rate ***your principal*** in terms of ***how frequently*** she or he engages in the practice described. Record your answers by circling the letter that corresponds to the frequency you have selected.

You are given five choices:

1. If he/she **RARELY** or **NEVER** does what is described in the statement, circle the letter **A**.
2. If he/she does what is described **ONCE IN A WHILE**, circle the letter **B.**
3. If he/she **SOMETIMES** does what is described, circle the letter **C.**
4. If he/she does what is described **FAIRLY OFTEN**, circle the letter **D.**
5. If he/she does what is described **VERY FREQUENTLY** or **ALWAYS,** circle the letter **E.**

In selecting your answers, be realistic about the extent to which the principal actually engage in each behaviour. Do not answer in terms of how you *would like* to see your principal or in terms of what your principal *should* be doing.

Answer in terms of how your principal *typically behave.* For example, if you believe your principal stay current on the most recent developments affecting your school *fairly often*, circle the letter **D.** If you believe your principal stays current on the most recent developments affecting your school *once in a while*, circle the letter **B.**

Please remember that there are no right or wrong answers, what is needed is your thoughtful assessment of each item in the survey.

School District
Please complete the following items.

1. Age *(Please indicate number.)*: _____

2. Sex *(Check one.)*: ☐ Female ☐ Male

3. Nationality ☐ Omani ☐ non-Omani

4. Number of years in teaching. *(Please indicate number.)* _____ Years

5. Number of years as teacher in present school. _____ Years
   (Please indicate number.)
   Subject _____

5. Highest level of education attained. *(Check one.)*

   ☐ Teacher training institute diploma

   ☐ Intermediate college for teacher training diploma

   ☐ Bachelor's degree in education

   ☐ Bachelor's degree other than education

   Please indicate area of specialization _____

   ☐ General diploma in education

   ☐ Master's degree in education

   ☐ Administrative certificate program

Circle the letter that describes to what extent you believe your principal engages in the following actions and behaviours.

		Rarely	Once in a While	Sometimes	Fairly Often	Very Frequently
1.	This principal ensures that policies, rules and procedures reflect the values and mission of the school.	**A**	**B**	**C**	**D**	**E**
2.	This principal spends time and energy to ensure that teachers develop a commonly held set of values.	**A**	**B**	**C**	**D**	**E**
3.	This principal shows others how personal success can become reality by participating in the reform's success.	**A**	**B**	**C**	**D**	**E**
4.	This principal gives teacher groups support for their efforts.	**A**	**B**	**C**	**D**	**E**
5.	This principal positively contributes to the implementation of teacher groups' action plans and projects.	**A**	**B**	**C**	**D**	**E**
6.	This principal encourages teachers to feel good about their professional accomplishments.	**A**	**B**	**C**	**D**	**E**
7.	This principal treats others with dignity and respect.	**A**	**B**	**C**	**D**	**E**
8.	This principal shares current educational information and practices with teachers.	**A**	**B**	**C**	**D**	**E**
9.	This principal keeps informed of innovations in teaching and learning.	**A**	**B**	**C**	**D**	**E**
10.	This principal bases reform decisions on evidence obtained through experience and collaborative discussion with colleagues.	**A**	**B**	**C**	**D**	**E**

		Rarely	Once in a While	Sometimes	Fairly Often	Very Frequently
11.	This principal informs teachers of this principal's beliefs on how to effectively run this school.	A	B	C	D	E
12.	This principal describes the kind of future she/he would like us to create together for this school.	A	B	C	D	E
13.	This principal encourages me to think about old problems in new ways (with a new perspective).	A	B	C	D	E
14.	This principal clearly communicates a positive, hopeful outlook for the implementation of the reform.	A	B	C	D	E
15.	This principal encourages teachers to share their positive attitudes towards education reform efforts.	A	B	C	D	E
16.	This principal refers to the school's academic goals when talking informally with teachers.	A	B	C	D	E
17.	This principal involves teachers in planning actions that are taken to implement reform efforts.	A	B	C	D	E
18.	This principal displays actions that reflect her/his philosophy of education.	A	B	C	D	E
19.	This principal ensures that teachers set clear goals, make plans, and establish milestones for the reform efforts they undertake.	A	B	C	D	E
20.	This principal involves teachers in decisions that affect classroom practices.	A	B	C	D	E
21.	This principal states that this school's curriculum committee makes a significant contribution to the school.	A	B	C	D	E

		Rarely	Once in a While	Sometimes	Fairly Often	Very Frequently
22.	This principal looks for innovative ways to improve what we do.	A	B	C	D	E
23.	This principal enrols in in-service programs so that he/she can improve performance in the classroom.	A	B	C	D	E
24.	This principal challenges the way we do things.	A	B	C	D	E
25.	This principal works to secure intangible resources (time, opportunities) for teachers who are working on reform projects.	A	B	C	D	E
26.	This principal tells stories about outstanding achievements of students or teachers, which exemplify the importance of the school's reform actions.	A	B	C	D	E
27.	This principal uses knowledge obtained through experience and collaborative discussion with colleagues to inform curriculum decisions.	A	B	C	D	E
28.	This principal experiments and takes risks with new approaches in his/her work even if there is a chance of failure.	A	B	C	D	E
29.	This principal directs attention to unnoticed aspects of the school environment.	A	B	C	D	E
30.	This principal expresses her/his appreciation when teachers do a good job.	A	B	C	D	E
31.	This principal applies policies, rules, and regulations uniformly.	A	B	C	D	E

		Rarely	Once in a While	Sometimes	Fairly Often	Very Frequently
32.	This principal gets teachers to develop a sense of ownership for the projects they undertake.	A	B	C	D	E
33.	This principal analyses the relationship between student performance and test results of student achievement.	A	B	C	D	E
34.	This principal breaks down activities into achievable, manageable tasks.	A	B	C	D	E
35.	This principal keeps up to date about new policies issued by the Ministry and Regional District that have an impact on our school.	A	B	C	D	E
36.	This principal consistently practices the values that the principal believes.	A	B	C	D	E
37.	This principal considers students' successful academic performance as her/his prime responsibility.	A	B	C	D	E
38.	This principal communicates her/his confidence in the abilities of teachers to achieve reform efforts.	A	B	C	D	E
39.	This principal develops co-operative relationships among teachers.	A	B	C	D	E
40.	This principal shows concern for teaching conditions by meeting with teachers to revise undesirable conditions.	A	B	C	D	E
41.	This principal looks ahead and forecasts what she/he believes the future will be like.	A	B	C	D	E
42.	This principal creates mutual trust among teachers working on instructional problems.	A	B	C	D	E

Now, Please, Check that you have answered "EVERY QUESTIONS"

Please Turn Over.

Please accept my thanks for taking the time to complete the survey questionnaire.

We will appreciate if you take a few munites to make some comments relevant to this survey in case we have missed something important especially you could give us your personal views about how the Reform has been implemented in your school and what have been the changes which that school made because of the Reform.

Any views which you will express will help this survey will be confidential, and will be used for the survey purpose only

Make your comments here :-

Appendix Two

مسح الأنشطة القيادية لمدراء المدارس .. المعلم

يرجى قراءة العبارات التالية بعناية ، ثم قم بوضع تقديرات لمدير مدرستكم بحسب عدد مـــرات مشاركته (مشاركتها) في الأنشطة الوارد وصفها . يمكن تسجيل إجاباتك بوضع دائرة على الحرف الذي يتفق مع عدد المرات التي قمت باختيارها .

لديك خمسة اختيارات على النحو التالي :

١- يرجى وضع دائرة على الحرف أ إذا كانت/كان **نادراً جداً** ما يقوم أو لا يقوم على الإطلاق بما ورد وصفه في العبارة .

٢- يرجى وضع دائرة على الحرف ب إذا كانت/كان **نادراً ما** يقوم بما ورد وصفه في العبارة.

٣- يرجى وضع دائرة على الحرف ج إذا كانت/كان يقوم بذلك النشاط **أحياناً** .

٤- يرجى وضع دائرة على الحرف د إذا كانت/كان يقوم بذلك النشاط **كثيراً إلى حد ما**.

٥- يرجى وضع دائرة على الحرف هـ إذا كانت/كان يقوم بذلك النشاط **كثيراً أو دائماً**.

يرجى أن تكون واقعياً عند اختيارك للإجابات وذلك من حيث مشاركة مدير المدرســة في كــل نشاط ، كما يرجى ألاّ تكون إجابتك من حيث الكيفية التي ترغب أن يكون عليها أو ما يجب أن يقــوم بأدائه .

يرجى أن تكون الإجابة من حيث تصرف مدير المدرسة على نحو نموذجي ، فعلى سبيل المثال بأن مدير المدرسة يقوم بمجاراة معظم التطورات الحالية التي تؤثر على مدرستك كثيراً إلى حد ما ، عليه يرجى وضع دائرة على الحرف د . أما إذا كنت تعتقد بأن مدير المدرسة يقوم بمجاراة معظم التطورات الحاليــة التي تؤثر على مدرستك في حالات نادرة عليه يرجى وضع دائرة على الحرف ب .

تذكر بأنه ليس هناك إجابات صحيحة أو خطأ ، وإنما المطلوب هو تقييمكم بعناية لكل بند وارد في هذا المسح .

Appendix Two

المنطقة التعليمية :

يرجى استكمال البيانات التالية :

١- العمر (يرجى كتابة عدد السنوات) : _____

٢- الجنس (يرجى وضع علامة (✓) على المربع الملائم) : ذكر ( ) أنثى ( ) .

٣- الجنسية : عماني ( ) غير عماني ( ) .

٤- عدد سنوات الخدمة في مجال التدريس (يرجى كتابة عدد السنوات) : _____ سنة .

٥- أ- عدد سنوات التدريس في المدرسة الحالية (يرجى كتابة عدد السنوات) : ___ سنة .

ب- المادة التي تقومون بتدريسها _____ .

٦- المستوى العالي من التعليم الذي تم إحرازه (يرجى وضع علامة (✓) على المربع الملائم :

- ☐ دبلوم معهد تدريب المعلمين .
- ☐ دبلوم الكلية المتوسطة لتدريب المعلمين .
- ☐ بكالوريوس التربية .
- ☐ درجة البكالوريوس بخلاف التربية .

يرجى توضيح مجال التخصص _____ .

- ☐ دبلوم عام في التربية .
- ☐ ماجستير التربية .
- ☐ شهادة برنامج إداري .

Appendix Two

يرجى وضع دائرة على الحرف الذي يوضح إلى أي مدى يشارك مدير مدرستكم في الأنشطة والأعمال :

م	العبـــــــــارة	مدى المشاركة				
		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
١	يتأكد هذا المدير/المديرة من أن السياسات والقواعد والإجراءات تعكس قيم ومهام المدرسة .	أ	ب	ج	د	هـ
٢	يبذل هذا المدير/المديرة جهده ووقته للتأكد من أن المعلمين يطورون مجموعة من القيم العامة المكتسبة.	أ	ب	ج	د	هـ
٣	يوضح هذا المدير/المديرة للآخرين بأن نجاحهم الشخصي يمكن أن يصبح واقعي من خلال مشاركتهم في نجاح عملية التطوير .	أ	ب	ج	د	هـ
٤	يقوم هذا المدير/المديرة بدعم جهود المعلمين .	أ	ب	ج	د	هـ
٥	يشارك هذا المدير/المديرة بطريقة إيجابية في تنفيذ خطط عمل ومشاريع مجموعات المعلمين .	أ	ب	ج	د	هـ
٦	يقوم هذا المدير/المديرة بتشجيع المعلمين على الشعور بارتياح تجاه ما حققوه من إنجازات .	أ	ب	ج	د	هـ
٧	يعامل هذا المدير/المديرة الآخرين بكل وقار واحترام .	أ	ب	ج	د	هـ
٨	يقوم هذا المدير/المديرة بتبادل أحدث المعلومات عن التعليم والممارسات مع المعلمين .	أ	ب	ج	د	هـ
٩	يظل هذا المدير/المديرة على اطلاع بطرق التدريس والتعليم الجديدة .	أ	ب	ج	د	هـ
١٠	يقوم هذا المدير/المديرة ببناء قرارات التطوير على الأدلة المكتسبة من خلال الخبرة والمناقشات المشتركة مع الزملاء .	أ	ب	ج	د	هـ

Appendix Two

م	العبـــــــــارة	مدى المشاركة				
		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
١١	يقوم هذا المدير/المديرة بإبلاغ المعلمين بآرائه حول كيفية إدارة هذه المدرسة .	أ	ب	ج	د	هـ
١٢	يقوم هذا المدير/المديرة بوصف نوعية المستقبل الذي يرغب بأن نشترك مع بعضنا البعض في إحداثه بهذه المدرسة .	أ	ب	ج	د	هـ
١٣	يشجعني هذا المدير/المديرة على التفكير في المشاكل القديمة بطرق حديثة (بمنظور جديد) .	أ	ب	ج	د	هـ
١٤	يقوم هذا المدير/المديرة وبوضوح بتبادل وجهات النظر الإيجابية والمليئة بالأمل وذلك فيما يتعلق بتنفيذ عملية التطوير .	أ	ب	ج	د	هـ
١٥	يشجع هذا المدير/المديرة المعلمين على تبادل مواقفهم الإيجابية تجاه الجهود المبذولة لتطوير التعليم .	أ	ب	ج	د	هـ
١٦	يتطرق هذا المدير/المديرة للأهداف الأكاديمية عند التحدث مع المعلمين بطريقة غير رسمية .	أ	ب	ج	د	هـ
١٧	يقوم هذا المدير/المديرة بإشراك المعلمين في تخطيط الإجراءات التي يتم اتخاذها من أجل تنفيذ جهود التطوير .	أ	ب	ج	د	هـ
١٨	يقوم هذا المدير/المديرة بعرض الإجراءات التي تعكس فلسفته/فلسفتها الخاصة بالتعليم .	أ	ب	ج	د	هـ
١٩	يتأكد هذا المدير/المديرة من أن المعلمين يقومون بوضع أهداف وخطط واضحة وأعمال مميزة عند تنفيذهم لجهود التطوير .	أ	ب	ج	د	هـ

Appendix Two

م	العبـــــــــارة	مدى المشاركة				
		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
٢٠	يشرك هـــذا المدير/المديرة العاملين في القـــرارات التي تؤثر على مزاولة العمل في الصف .	أ	ب	ج	د	هـــ
٢١	يوضح هذا المدير/المديرة بأن لجنة المنهج بالمدرسة تقدم مساهمات كبيرة للمدرسة .	أ	ب	ج	د	هـــ
٢٢	يتطلع هذا المدير/المديرة لطرق جديدة لتحسين ما نقوم بعمله .	أ	ب	ج	د	هـــ
٢٣	يشارك هذا المدير/المديرة في برامج التدريب أثناء الخدمة وذلك حتى يتمكن من تحســين الأداء في الصف .	أ	ب	ج	د	هـــ
٢٤	يضع هذا المدير/المديرة تحديات لطرق إنجاز العمل.	أ	ب	ج	د	هـــ
٢٥	يؤمن هذا المدير/المديرة المـــوارد غـــير الملموســـة (الوقت والفرص) للمعلمين العاملين في مشـــاريع التطوير .	أ	ب	ج	د	هـــ
٢٦	يروي هذا المدير/المديرة قصص عـــن الإنجـــازات الرائعة للتلاميـــذ أو المعلمين والتي في حد ذاتهـــا تعتبر مثالاً يحتذى به فيما يتعلق بأهمية إجـــراءات التطوير في المدرسة .	أ	ب	ج	د	هـــ
٢٧	يستخدم هذا المدير/المديرة المعرفة المكتســـبة مـــن خلال الخبرة والمناقشات المشتركة مـــع الـــزملاء للإبلاغ عن القرارات المتعلقة بالمنهج .	أ	ب	ج	د	هـــ
٢٨	يجرب هذا المدير/المديرة الطـــرق الجديدة بعـــزم على تنفيذها في مجال عمله/عملها حتى ولو كـــان هناك احتمال الفشل .	أ	ب	ج	د	هـــ

Appendix Two

م	العبـــــــــارة	مدى المشاركة				
		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
٢٩	يوجه هذا المدير/المديرة اهتمامه/اهتمامها للجوانب غير المرئية في بيئة المدرسة .	أ	ب	ج	د	هـ
٣٠	يعبر هذا المدير/المديرة عن إعجابه/إعجابها وتقديره/تقديرها عندما يقوم الآخرين بأداء العمل بطريقة جيدة .	أ	ب	ج	د	هـ
٣١	يطبق هذا المدير/المديرة السياسات والقوانين واللوائح بطريقة منتظمة .	أ	ب	ج	د	هـ
٣٢	يبعث هذا المدير/المديرة في المعلمين الشعور بأنهم أصحاب هذه المشاريع التي يقومون بتنفيذها .	أ	ب	ج	د	هـ
٣٣	يحلل هذا المدير/المديرة العلاقة بين أداء التلميذ ونتائج امتحاناته .	أ	ب	ج	د	هـ
٣٤	يقسّم هذا المدير/المديرة الأنشطة إلى مهام يمكن إنجازها وأخرى يمكن إدارتها .	أ	ب	ج	د	هـ
٣٥	يظل هذا المدير/المديرة على اطلاع بالسياسات الجديدة التي تؤثر على مدرستنا والصادرة من الوزارة والمنطقة التعليمية .	أ	ب	ج	د	هـ
٣٦	يمارس هذا المدير/المديرة باستمرار القيم التي يؤمن/تؤمن بها .	أ	ب	ج	د	هـ
٣٧	يعتبر هذا المدير/المديرة نجاح التلاميذ من مسئولياته الرئيسية .	أ	ب	ج	د	هـ
٣٨	يعبر هذا المدير/المديرة عن ثقته/ثقتها في قدرات المعلمين على تحقيق التطوير المنشود .	أ	ب	ج	د	هـ

Appendix Two

م	العبـــــــــارة	مدى المشاركة				
		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
٣٩	يعمل هذا المدير/المديرة علـى تطـوير علاقـات التعاون بين المعلمين	أ	ب	ج	د	هـ
٤٠	يُبدي هذا المدير/المـديرة اهتمـامه/اهتمامهـا بأوضاع التدريس من خلال الاجتماع بـالمعلمين لمراجعة الأوضاع غير المرغوب فيها .	أ	ب	ج	د	هـ
٤١	يفكر هذا المدير/المديرة في المستقبل ويتنبأ/تتنبأ بما سيكون عليه .	أ	ب	ج	د	هـ
٤٢	يقوم هذا المدير/المديرة بإيجاد ثقة متبادلـة بـين المعلمين الذين يقومون بمعالجة مشاكل التدريس .	أ	ب	ج	د	هـ

يرجى التأكد أنك قد أجبت على جميع الأسئلة

أرجو النظر إلى خلف الصفحة

Appendix Two

أرجو قبول شكري وتقديري على الوقت الذي بذلتموه في تكملة الاستبيان .

سنكون ممتنين لو قمتم بأخذ بعض الوقت للتعليق وإضافة ما ترونه مناسباً ويســـاهم في أهداف البحث خاصة ما يتعلق في الخطوات التي تم اتخاذها في مدرستكم لتنفيذ تطوير التعليم .

أية آراء تودون إيضاحها ستعامل بسرية وستستخدم لغرض البحث فقط .

الباحث

الرجاء عمل ملاحظاتكم في هذه الصفحة :

Appendix two

Collaborative Culture Survey (C.C.S)-- Teacher

Please read each of the following statements carefully, then rate ***yourself*** in terms of ***how frequently*** you engage in the practice described. Record your answers by circling the letter that corresponds to the frequency you have selected.

You are given five choices:

1. If you **RARELY** or **NEVER** do what is described in the statement, circle the letter **A.**
2. If you do what is described **ONCE IN A WHILE**, circle the letter **B.**
3. If you **SOMETIMES** do what is described, circle the letter **C.**
4. If you do what is described **FAIRLY OFTEN**, circle the letter **D.**
5. If you do what is described **VERY FREQUENTLY** or **ALWAYS,** circle the letter **E.**

In selecting your answers, be realistic about the extent to which you actually engage in each behaviour. Do not answer in terms of how you *would like* to see yourself or in terms of what you *should* be doing.

Answer in terms of how you *typically behave.* For example, if you believe you stay current on the most recent developments affecting your school *fairly often*, circle the letter **D.** If you believe you stay current on the most recent developments affecting your school *once in a while*, circle the letter **B.**

Please remember that there are no right or wrong answers, what is needed is your thoughtful assessment of each item in the survey.

Circle the letter that describes to what extent you believe you engage in the following actions and behaviours.

		Rarely	Once in a While	Sometimes	Fairly Often	Very Frequently
1.	I rethink some of my teaching routines that I have taken for granted when these routines are challenged by other teachers.	A	B	C	D	E
2.	I encourage fellow teachers to think about old problems in new ways (with a new perspective).	A	B	C	D	E
3.	I refer to the school's academic goals when talking informally with fellow teachers.	A	B	C	D	E
4.	I work to achieve a consensus of opinion among teachers concerning reform efforts.	A	B	C	D	E
5.	I believe the school's curriculum committee makes a significant contribution to the school	A	B	C	D	E
6.	I look at reform decisions as evidence obtained through experience and collaborative discussion with colleagues.	A	B	C	D	E
7.	I join fellow teachers in celebrating accomplishments.	A	B	C	D	E
8.	I tell stories about outstanding achievements of students or other teachers, which exemplify the importance of the school's reform actions.	A	B	C	D	E
9.	When decision making opportunities arise. I promote actions that advance reform efforts.	A	B	C	D	E

		Rarely	Once in a While	Sometimes	Fairly Often	Very Frequently
10.	I keep up to date about the new policies issued by the Ministry and Regional District that have an impact on our school.	**A**	**B**	**C**	**D**	**E**
11.	I believe the school's curriculum committee has made changes that have a positive impact on student academic achievement.	**A**	**B**	**C**	**D**	**E**
12.	I consider students' successful academic performance as my prime responsibility.	**A**	**B**	**C**	**D**	**E**
13.	I look for feedback, other than formal test results, of student performance.	**A**	**B**	**C**	**D**	**E**
14.	I find working on school projects with other teachers more rewarding than working independently.	**A**	**B**	**C**	**D**	**E**
15.	I display actions that reflect my philosophy of education.	**A**	**B**	**C**	**D**	**E**
16.	I discuss innovations that focus on the improvement of instructional strategies with other teachers.	**A**	**B**	**C**	**D**	**E**
17.	I participate in teacher groups that plan actions that will be taken.	**A**	**B**	**C**	**D**	**E**
18.	I look for feedback, other than the formal evaluation system, about my performance.	**A**	**B**	**C**	**D**	**E**
19.	I evaluate teaching strategies and materials to select those that best meet students' needs.	**A**	**B**	**C**	**D**	**E**
20.	I work co-operatively with fellow teachers.	**A**	**B**	**C**	**D**	**E**

		Rarely	Once in a While	Sometimes	Fairly Often	Very Frequently
21.	I enrol in in-service programs so that I can improve performance in the classroom.	A	B	C	D	E
22.	I communicate my confidence in the abilities of my fellow teachers to achieve reform efforts.	A	B	C	D	E
23.	I seek out challenging opportunities that test my skills and abilities.	A	B	C	D	E
24.	I give fellow teachers support for their efforts.	A	B	C	D	E
25.	I break down projects I undertake into achievable, manageable tasks.	A	B	C	D	E
26.	I clearly communicate a positive, hopeful outlook for the implementation of the reform.	A	B	C	D	E
27.	I treat others with dignity and respect.	A	B	C	D	E
28.	I experiment and take risks with new approaches in my work even if there is a chance of failure.	A	B	C	D	E
29.	I consistently practice the values held by fellow teachers and the principal.	A	B	C	D	E
30.	I look ahead and forecast what I believe the future will be like.	A	B	C	D	E
31.	I ensure that teachers set clear goals, make plans, and establish milestones for the reform efforts we undertake.	A	B	C	D	E

		Rarely	Once in a While	Sometimes	Fairly Often	Very Frequently
32.	I take an active interest in my work.	A	B	C	D	E
33.	I take actions to ensure that students perform well on national and local achievement tests.	A	B	C	D	E
34.	I show fellow teachers how their personal success can become reality by participating in the reform's success.	A	B	C	D	E
35.	I encourage fellow teachers to adhere to the values we commonly hold.	A	B	C	D	E
36.	I discuss with fellow teachers the kind of future I would like us to create together for this school.	A	B	C	D	E
37.	I propagate policies, rules and procedures, which reflect the values and mission of the school.	A	B	C	D	E
38.	I encourage fellow teachers to feel good about their professional accomplishments.	A	B	C	D	E
39.	I look for innovative ways to improve what we do.	A	B	C	D	E
40.	I share current educational information and practices with fellow teachers.	A	B	C	D	E
41.	I appeal to fellow teachers to share their dreams for the future.	A	B	C	D	E
42.	I believe teachers display mutual trust toward each other.	A	B	C	D	E

Now, Please, Check that you have answered "EVERY QUESTIONS"

Please Turn Over

Please accept my thanks for taking the time to complete the survey questionnaire.

We will appreciate if you take a few minutes to make some comments relevant to this survey in case we have missed something important especially you could give us your personnel views about how the Reform has been implemented in your school and what have been the changes which that school made because of the Reform.

Any views which you will express will help this survey will be confidential, and will be used for the survey purpose only

Make your comments here :-

Appendix Two

مسح القيم المشتركة .. المعلم

يرجى قراءة العبارات التالية بعناية ، ثم قم بوضع تقديرات لشخصك من حيث عدد مرات مشاركتك في الأنشطة الوارد وصفها . يمكن تسجيل إجاباتك بوضع دائرة على الحرف الذي يتفق مع عدد المرات التي قمت باختيارها .

لديك خمسة اختيارات على النحو التالي :

١- يرجى وضع دائرة على الحرف أ إذا كنت **نادراً جداً** ما تقوم أو لا تقوم على الإطلاق بما ورد وصفه في العبارة .

٢- يرجى وضع دائرة على الحرف ب إذا كنت **نادراً ما** تقوم بما ورد وصفه في العبارة.

٣- يرجى وضع دائرة على الحرف ج إذا كنت تقوم بذلك النشاط **أحياناً** .

٤- يرجى وضع دائرة على الحرف د إذا كنت تقوم بذلك النشاط **كثيراً إلى حد ما**.

٥- يرجى وضع دائرة على الحرف هـ إذا كنت تقوم بذلك النشاط **كثيراً أو دائماً**.

يرجى أن تكون واقعياً عند اختيارك للإجابات وذلك من حيث مدى مشاركتك الفعلية في كل نشاط ، كما يرجى ألاّ تكون إجابتك من حيث الكيفية التي ترغب أن يكون عليها أو ما يجب أن يقوم بأدائه .

كما يرجى أن تكون إجابتك من حيث تصرفك على نحو نموذجي ، فعلى سبيل المثال إذا كنت تقوم بمجاراة معظم التطورات الحالية التي تؤثر على مدرستك كثيراً إلى حد ما ، عليه يرجى وضع دائرة على الحرف د . أما إذا كنت تعتقد بأنك تقوم بمجاراة معظم التطورات الحالية التي تؤثر على مدرستك في حالات نادرة عليه يرجى وضع دائرة على الحرف ب .

تذكر بأنه ليس هناك إجابات صحيحة أو خطأ ، وإنما المطلوب هو تقييمكم بعناية لكل بند وارد في هذا المسح .

Appendix Two

المنطقة التعليمية :

يرجى استكمال البيانات التالية :

١- العمر (يرجى كتابة عدد السنوات) : _____

٢- الجنس (يرجى وضع علامة (✓) على المربع الملائم) : ذكر ( ) أنثى ( ) .

٣- الجنسية : عماني ( ) غير عماني ( ) .

٤- عدد سنوات الخدمة في مجال التدريس (يرجى كتابة عدد السنوات) : _____ سنة .

٥- أ- عدد سنوات التدريس في المدرسة الحالية (يرجى كتابة عدد السنوات : ___ سنة .

ب- المادة التي تقومون بتدريسها _____ .

٦- المستوى العالي من التعليم الذي تم إحرازه (يرجى وضع علامة (✓) على المربع الملائم :

- ☐ دبلوم معهد تدريب المعلمين .
- ☐ دبلوم الكلية المتوسطة لتدريب المعلمين .
- ☐ بكالوريوس التربية .
- ☐ درجة البكالوريوس بخلاف التربية .

يرجى توضيح مجال التخصص _____ .

- ☐ دبلوم عام في التربية .
- ☐ ماجستير التربية .
- ☐ شهادة برنامج إداري .

Appendix Two

يرجى وضع دائرة على الحرف الذي يوضح مدى مشاركتك في الأنشطة والأعمال التالية :

م	العبـــــــــارة	مدى المشاركة				
		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
١	أعيد النظر في بعض أعمال التدريس الروتينية التي أقوم بها عندما تواجه هـــذه الأعمـــال الروتينيـــة بتحديات من المعلمين الآخرين .	أ	ب	ج	د	هـــ
٢	أشجع المعلمين على التفكير في المشاكل القديمـــة بطرق حديثة (بمنظور جديد) .	أ	ب	ج	د	هـــ
٣	أتطرق للأهداف الأكاديمية للمدرسة عندما أتحدث مع المعلمين بطريقة غير رسمية .	أ	ب	ج	د	هـــ
٤	أعمل على التوصل إلى إجماع في الرأي بين المعلمين المهتمين بجهود التطوير .	أ	ب	ج	د	هـــ
٥	أعتقد بأن لجنة المنهج بالمدرسة تقـــدم مســـاهمات كبيرة للمدرسة .	أ	ب	ج	د	هـــ
٦	أنظر إلى قرارات التطوير على أن لها أدلة مكتسبة من الخبرة والمناقشات مع الزملاء .	أ	ب	ج	د	هـــ
٧	أشارك المعلمين في احتفالهم بالإنجازات .	أ	ب	ج	د	هـــ
٨	أروي قصصاً عن الإنجازات الرائعة للتلاميـــذ أو المعلمين والتي في حد ذاتها تعتبر مثالاً يحتـــذى بـــه فيما يتعلق بأهمية إجرءات التطوير في المدرسة .	أ	ب	ج	د	هـــ
٩	استخدام الفرص المتاحة لصنع القرارات لتعزيـــز الإجراءات التي تؤدي إلى تحسين جهود التطوير في المدرسة .	أ	ب	ج	د	هـــ

Appendix Two

م	العبـــــــــارة	مدى المشاركة				
		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
١٠	أظل على اطلاع بالسياسات الجديدة التي تـؤثر على مدرستنا والصادرة مـن الـوزارة والمنطقـة التعليمية .	أ	ب	ج	د	هـ
١١	أعتقد بأن لجنة المنهج بالمدرسة قد أحدثت تغييرات ذات تأثير إيجابي علـى التحصـيل الأكـاديمي للتلاميذ .	أ	ب	ج	د	هـ
١٢	أعتـبر نجاح التلاميذ أكاديميـاً مـن مسـئولياتي الرئيسية .	أ	ب	ج	د	هـ
١٣	أتطلع للتزود بمعلومات (تغذية مرتدة) عـن أداء التلاميذ بدلاً من نتائج الامتحانات الرسمية .	أ	ب	ج	د	هـ
١٤	أعتبر بأن العمل في مشاريع المدرسة مع معلمـين آخرين أكثر فائدة من العمل بطريقة مستقلة .	أ	ب	ج	د	هـ
١٥	أعرض الإجراءات التي تعكس فلسفتي الخاصـة بالتعليم .	أ	ب	ج	د	هـ
١٦	أناقش مع المعلمين الآخرين الأفكار الجديدة الـتي تركز على إدخال تحسـينات في اسـتراتيجيات التدريس .	أ	ب	ج	د	هـ
١٧	أشارك في مجموعات المعلمين التي تقوم بتخطـيط الأعمال التي سيتم إنجازها .	أ	ب	ج	د	هـ
١٨	أتطلع للتزود بمعلومات (تغذية مرتدة) عن أدائـي بدلاً من النظام الرسمي لتقييم الأداء .	أ	ب	ج	د	هـ

Appendix Two

م	العبـــــــــارة	مدى المشاركة				
		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
١٩	أقـيّم استراتيجيات التدريس والمواد بهدف اختيار تلك الملائمة والمستوفية لاحتياجات التلاميذ .	أ	ب	ج	د	هـ
٢٠	أتعاون مع زملائي المعلمين .	أ	ب	ج	د	هـ
٢١	أشارك في برامج التدريب أثناء الخدمة وذلك حتى أتمكن من تحسين أدائي داخل الصف .	أ	ب	ج	د	هـ
٢٢	أُعبر عن ثقتي في قدرات زملائي المعلمـين علـى تحقيق التطوير المنشود .	أ	ب	ج	د	هـ
٢٣	أبحث عن الفرص المواتيـة التي تختـبر مهـاراتي وقدراتي .	أ	ب	ج	د	هـ
٢٤	أدعم جهود زملائي المعلمين .	أ	ب	ج	د	هـ
٢٥	أقسم المشاريع التي أتولى تنفيذها إلى مهام ممكـن إنجازها وأخرى يمكن إدارتها .	أ	ب	ج	د	هـ
٢٦	أتبادل بوضوح وجهات النظر الإيجابيـة والمليئـة بالأمل وذلك فيما يتعلق بتنفيذ عملية التطوير .	أ	ب	ج	د	هـ
٢٧	أعامل الآخرين بكل وقار واحترام .	أ	ب	ج	د	هـ
٢٨	أجرب الطرق الجديدة وأعزم على تنفيذها في مجال العمل حتى ولو كان هناك احتمال للفشل .	أ	ب	ج	د	هـ
٢٩	أمـارس باستمرار بممارسة القيم التي يـؤمن بهـا مدير المدرسة والمعلمين .	أ	ب	ج	د	هـ
٣٠	أفكر في المستقبل وأتنبأ بما سيكون عليه .	أ	ب	ج	د	هـ

Appendix Two

م	العبـــــــــارة	مدى المشاركة				
		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
٣١	أتأكد من قيام المعلمين بوضع أهـداف وخطـط واضحـة وأعمال مميزة عنـد تنفيـذهم لجهـود التطوير .	أ	ب	ج	د	هـ
٣٢	أهتم بدرجة فعالة بعملي .	أ	ب	ج	د	هـ
٣٣	أتخذ الإجراءات الكفيلة بضـمان أداء التلاميـذ للامتحانـات على المسـتويين المحلـي والـوطني بطريقة جديدة .	أ	ب	ج	د	هـ
٣٤	أوضح للمعلمين بأن نجاحهم الشخصي يمكـن أن يصبح واقعي من خلال مشاركتهم في نجاح عملية التطوير .	أ	ب	ج	د	هـ
٣٥	أشجع المعلمين على الالتزام بالقيم العامة المكتسبة.	أ	ب	ج	د	هـ
٣٦	أتناقش مع المعلمين حول الأمور المتعلقة بنوعيـة المستقبل الذي أرغب في أن تقوم بإحداثه في هذه المدرسة .	أ	ب	ج	د	هـ
٣٧	أقوم بتنفيذ السياسات والقواعد والإجراءات التي تعكس قيم ومهام المدرسة .	أ	ب	ج	د	هـ
٣٨	أشجع المعلمين على الشعور بارتياح تجاه ما حققوه من إنجازات مهنية .	أ	ب	ج	د	هـ
٣٩	أتطلـع لطرق جديدة وذلك لتحسين مـا نقـوم بعمله .	أ	ب	ج	د	هـ
٤٠	أتبادل مع المعلمين أحدث المعلومات والممارسات حول التعليم والممارسات .	أ	ب	ج	د	هـ

Appendix Two

م	العبـــــــــارة	مدى المشاركة				
		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
٤١	أناشد المعلمين من أجـــل المشـــاركة في عـــرض أحلامهم حول المستقبل .	أ	ب	ج	د	هـــ
٤٢	أعتقد بأن المعلمين يظهرون الثقة المتبادلـــة فيمـــا بينهم .	أ	ب	ج	د	هـــ

يرجى التأكد أنك قد أجبت على جميع الأسئلة

أرجو النظر إلى خلف الصفحة

Appendix Two

أرجو قبول شكري وتقديري على الوقت الذي بذلتموه في تكملة الاستبيان .

سنكون ممتنين لو قمتم بأخذ بعض الوقت للتعليق وإضافة ما ترونه مناسباً ويســـاهم في أهداف البحث خاصة ما يتعلق في الخطوات التي تم اتخاذها في مدرستكم لتنفيذ تطوير التعليم .

أية آراء تودون إيضاحها ستعامل بسرية وستستخدم لغرض البحث فقط .

الباحث

الرجاء عمل ملاحظاتكم في هذه الصفحة :

Appendix Two

Collaborative Culture Survey (C.C.S) -- Principal

Please read each of the following statements carefully, then rate ***your staff*** in terms of ***how frequently*** they engage in the practice described. Record your answers by circling the letter that corresponds to the frequency you have selected.

You are given five choices:

1. If they **RARELY** or **NEVER** do what is described in the statement, circle the letter **A.**
2. If they do what is described **ONCE IN A WHILE**, circle the letter **B.**
3. If they **SOMETIMES** do what is described, circle the letter **C.**
4. If they do what is described **FAIRLY OFTEN**, circle the letter **D.**
5. If they do what is described **VERY FREQUENTLY** or **ALWAYS,** circle the letter **E.**

In selecting your answers, be realistic about the extent to which the staff actually engage in each behaviour. Do not answer in terms of how you *would like* to see your staff or in terms of what your staff *should* be doing.

Answer in terms of how your staff *typically behave.* For example, if you believe your staff stays current on the most recent developments affecting your school *fairly often*, circle the letter **D.** If you believe your staff stays current on the most recent developments affecting your school *once in a while*, circle the letter **B.**

Please remember that there are no right or wrong answers, what is needed is your thoughtful assessment of each item in the survey.

The staff in your school will also complete the Collaborative Culture Survey -- Self. Their responses will be treated confidentially.

Circle the letter that describes to what extent you believe your staff engages in the following actions and behaviours.

		Rarely	Once in a While	Sometimes	Fairly Often	Very Frequently
1.	This school's teachers rethink some of the teaching routines that they have taken for granted when these routines are challenged by me or other teachers.	**A**	**B**	**C**	**D**	**E**
2.	This school's teachers encourage each other to think about old problems in new ways (with a new perspective).	**A**	**B**	**C**	**D**	**E**
3.	This school's teachers refer to the school's academic goals when talking informally with each other.	**A**	**B**	**C**	**D**	**E**
4.	This school's teachers work to achieve a consensus of opinion among them selves concerning reform efforts.	**A**	**B**	**C**	**D**	**E**
5.	This school's teachers believe the school's curriculum committee makes a significant contribution to the school	**A**	**B**	**C**	**D**	**E**
6.	This school's teachers look at reform decisions as evidence obtained through experience and collaborative discussion with colleagues.	**A**	**B**	**C**	**D**	**E**
7.	This school's teachers join others in celebrating accomplishments.	**A**	**B**	**C**	**D**	**E**
8.	This school's teachers tell stories about outstanding achievements of students or other teachers which exemplify the importance of the school's reform actions.	**A**	**B**	**C**	**D**	**E**
9.	This school's teachers use decision making opportunities to promote actions that advance school reform efforts.	**A**	**B**	**C**	**D**	**E**
10.	This school's teachers keep up to date about the new policies issued by the Ministry and Regional District that have an impact on our school.	**A**	**B**	**C**	**D**	**E**

		Rarely	Once in a While	Sometimes	Fairly Often	Very Frequently
11.	This school's teachers believe the school's curriculum committee has made changes that have a positive impact on student academic achievement.	A	B	C	D	E
12.	This school's teachers consider students' successful academic performance as their prime responsibility.	A	B	C	D	E
13.	This school's teachers look for feedback, other than formal test results, of student performance.	A	B	C	D	E
14.	This school's teachers find working on school projects with other teachers more rewarding than working independently.	A	B	C	D	E
15.	This school's teachers display actions that reflect their philosophy of education.	A	B	C	D	E
16.	This school's teachers discuss innovations that focus on the improvement of instructional strategies with other teachers.	A	B	C	D	E
17.	This school's teachers participate in teacher groups that plan actions that will be taken.	A	B	C	D	E
18.	This school's teachers look for feedback, other than the formal evaluation system, about their performance.	A	B	C	D	E
19.	This school's teachers evaluate teaching strategies and materials to select those that best meet students' needs.	A	B	C	D	E
20.	This school's teachers work co-operatively with fellow teachers.	A	B	C	D	E

		Rarely	Once in a While	Sometimes	Fairly Often	Very Frequently
21.	This school's teachers enrol in in-service programs so that they can improve performance in the classroom.	A	B	C	D	E
22.	This school's teachers communicate their confidence in the abilities of teachers to achieve reform efforts.	A	B	C	D	E
23.	This school's teachers seek out challenging opportunities that test their skills and abilities.	A	B	C	D	E
24.	This school's teachers give there colleagues support for their efforts.	A	B	C	D	E
25.	This school's teachers break down projects they undertake into achievable, manageable tasks.	A	B	C	D	E
26.	This school's teachers clearly communicate a positive, hopeful outlook for the implementation of the reform	A	B	C	D	E
27.	This school's teachers treat others with dignity and respect.	A	B	C	D	E
28.	This school's teachers experiment and take risks with new approaches in their work even if there is a chance of failure.	A	B	C	D	E
29.	This school's teachers consistently practice the values held by teachers and the principal.	A	B	C	D	E
30.	This school's teachers look ahead and forecast what they believe the future will be like.	A	B	C	D	E
31.	This school's teachers, when working in-groups, set clear goals, make plans, and establish milestones for the reform efforts they undertake.	A	B	C	D	E

		Rarely	Once in a While	Sometimes	Fairly Often	Very Frequently
32.	This school's teachers take an active interest in their work.	A	B	C	D	E
33.	This school's teachers take actions to ensure that students perform well on national and local achievement tests.	A	B	C	D	E
34.	This school's teachers show each other how their personal success can become reality by participating in the reform's success.	A	B	C	D	E
35.	This school's teachers encourage each other to adhere to the values they commonly hold.	A	B	C	D	E
36.	This school's teachers discuss with each other the kind of future they would like us to create for this school.	A	B	C	D	E
37.	This school's teachers enforce policies, rules and procedures, which reflect the values and mission of the school.	A	B	C	D	E
38.	This school's teachers encourage each other to feel good about their professional accomplishments.	A	B	C	D	E
39.	This school's teachers look for innovative ways to improve what they do.	A	B	C	D	E
40.	This school's teachers share current educational information and practices with each other.	A	B	C	D	E
41.	This school's teachers appeal to each other to share their dreams for the future.	A	B	C	D	E
42.	This school's teachers display mutual trust toward each other.	A	B	C	D	E

Now, Please, Check that you have answered "EVERY QUESTIONS"

Please Turn Over

Please accept my thanks for taking the time to complete the survey questionnaire.

We will appreciate if you take a few minutes to make some comments relevant to this survey in case we have missed something important especially you could give us your personal views about how the Reform has been implemented in your school and what have been the changes which that school made because of the Reform.

Any views which you will express will help this survey will be confidential, and will be used for the survey purpose only

Make your comments here :-

Appendix Two

مسح القيم المشتركة .. مدير المدرسة

يرجى قراءة العبارات التالية بعناية ، ثم قم بوضع تقديرات لشخصك من حيث عدد مرات مشاركتهم في الأنشطة الوارد وصفها . يمكن تسجيل إجاباتك بوضع دائرة على الحرف الذي يتفق مع عدد المرات التي قمت باختيارها .

لديك خمسة اختيارات على النحو التالي :

١- يرجى وضع دائرة على الحرف أ في حالة **نادراً** ما يقومون أو لا يقومون على الإطلاق بما ورد وصفه في العبارة .

٢- يرجى وضع دائرة على الحرف ب عند قيامهم بما ورد وصفه **في حالات نادرة جداً** .

٣- يرجى وضع دائرة على الحرف ج في حالة قيامهم بذلك النشاط **أحياناً** .

٤- يرجى وضع دائرة على الحرف د إذا حالة قيامهم يقوم بذلك النشاط **كثيراً إلى حد ما**.

٥- يرجى وضع دائرة على الحرف هـ في حالة قيامهم بذلك النشاط **كثيراً أو دائماً**.

يرجى أن تكون واقعياً عند اختيارك للإجابات وذلك من حيث مدى المشاركة الفعلية في كل نشاط ، كما يرجى ألاّ تكون إجابتك من حيث الكيفية التي ترغب أن تكون عليها أو ما يجب أن يقوموا بأدائه .

كما يرجى أن تكون الإجابة من حيث تصرف موظفيك على نحو نموذجي ، فعلى سبيل المثال بأن موظفيك يقومون بمجاراة معظم التطورات الحالية التي تؤثر على مدرستك كثيراً إلى حد ما ، عليه يرجى وضع دائرة على الحرف د . أما إذا كنت تعتقد بأن موظفيك يقومون بمجاراة معظم التطورات الحالية التي تؤثر على مدرستك في حالات نادرة عليه يرجى وضع دائرة على الحرف ب .

تذكر بأنه ليس هناك إجابات صحيحة أو خطأ ، وإنما المطلوب هو تقييمكم بعناية لكل بند وارد في هذا المسح .

علماً بأن معلمي مدرستكم سوف يقومون بالإجابة على مسح القيم المشتركة .. ذاتي ، وإن إجاباتهم سوف تعامل بسرية .

Appendix Two

المنطقة التعليمية :

يرجى استكمال البيانات التالية :

١- العمر (يرجى كتابة عدد السنوات) : _____

٢- الجنس (يرجى وضع علامة (✓) على المربع الملائم) : ذكر ( ) أنثى ( ) .

٣- الجنسية : عماني ( ) غير عماني ( ) .

٤- عدد سنوات الخدمة في وظيفة (وظائف) إدارية : _____ سنة .

٥- عدد سنوات توليكم مديراً للمدرسة الحالية : _____ سنة .

٦- سنة الحصول على شهادة التدريس : _____ .

٧- سنة الحصول على شهادة الإدارة : _____ .

٨- المستوى العالي من التعليم الذي تم إحرازه (يرجى وضع علامة (✓) على المربع الملائم :

- ❑ دبلوم معهد تدريب المعلمين .
- ❑ دبلوم الكلية المتوسطة لتدريب المعلمين .
- ❑ بكالوريوس التربية .
- ❑ درجة البكالوريوس بخلاف التربية .

يرجى توضيح مجال التخصص _____ .

- ❑ دبلوم عام في التربية .
- ❑ ماجستير التربية .
- ❑ شهادة برنامج إداري .
- ❑ درجات أخرى _____ .

Appendix Two

يرجى وضع دائرة على الحرف الذي يوضح مدى مشاركة موظفيك في الأنشطة والإجراءات التالية :

م	العبـــــــــارة	مدى المشاركة				
		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
١	يقوم معلمو هذه المدرسة بإعادة النظر في بعض أعمال التدريس الروتينية عندما تواجه هذه الأعمال الروتينية بتحديات من شخص أو من المعلمين الآخرين .	أ	ب	ج	د	هـ
٢	يقوم معلمو هذه المدرسة بتشجيع بعضهم البعض على التفكير في المشاكل القديمة بطرق حديثة .	أ	ب	ج	د	هـ
٣	يتطرق معلمو هذه المدرسة للأهداف الأكاديمية للمدرسة عندما يتحدثون بطريقة غير رسمية مع بعضهم البعض .	أ	ب	ج	د	هـ
٤	يعمل معلمو هذه المدرسة على التوصل إلى إجماع في الرأي بين المعلمين المهتمين بجهود التطوير .	أ	ب	ج	د	هـ
٥	يعتقد معلمو هذه المدرسة بأن لجنة المنهج بالمدرسة تقدم مساهمات كبيرة للمدرسة .	أ	ب	ج	د	هـ
٦	ينظر معلمو هذه المدرسة إلى قرارات التطوير على أنها لها أدلة مكتسبة من الخبرة والمناقشات مع الزملاء .	أ	ب	ج	د	هـ
٧	يشارك معلمو هذه المدرسة المعلمين الآخرين في احتفالهم بالإنجازات .	أ	ب	ج	د	هـ
٨	يقوم معلمو هذه المدرسة برواية قصص عن الإنجازات الرائعة للتلاميذ أو المعلمين والتي في حد ذاتها تعتبر مثالاً يحتذى به فيما يتعلق بأهمية إجراءات التطوير في المدرسة .	أ	ب	ج	د	هـ

Appendix Two

م	العبـــــــــارة	مدى المشاركة				
		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
٩	يستخدم معلمو هذه المدرسة الفرص المتاحة لصنع القرارات لتعزيز الإجراءات التي تؤدي إلى تحسين جهود التطوير بالمدرسة .	أ	ب	ج	د	هـ
١٠	يظل معلمو هذه المدرسة على اطلاع بالسياسات الجديدة التي تؤثر على مدرستنا والصادرة من الوزارة والمنطقة الإقليمية .	أ	ب	ج	د	هـ
١١	يعتقد معلمو هذه المدرسة بأن لجنة المنهج بالمدرسة قد أحدثت تغييرات ذات تأثير إيجابي على التحصيل الأكاديمي للتلاميذ .	أ	ب	ج	د	هـ
١٢	يعتبر معلمو هذه المدرسة بأن نجاح التلاميذ أكاديمياً من ضمن مسئولياتهم الرئيسية .	أ	ب	ج	د	هـ
١٣	يتطلع معلمو هذه المدرسة للتزويد بمعلومات (تغذية مرتدة) عن أداء التلاميذ بدلاً من نتائج الامتحانات الرسمية .	أ	ب	ج	د	هـ
١٤	يعتبر معلمو هذه المدرسة بأن العمل في مشاريع المدرسة مع معلمين آخرين أكثر فائدة من العمل بطريقة مستقلة .	أ	ب	ج	د	هـ
١٥	يقوم معلمو هذه المدرسة بعرض الإجراءات التي تعكس فلسفتهم المتعلقة بالتعليم .	أ	ب	ج	د	هـ
١٦	يناقش معلمو هذه المدرسة مع المعلمين الآخرين الأفكار الجديدة التي تركز على إدخال تحسينات في استراتيجيات التدريس .	أ	ب	ج	د	هـ

Appendix Two

م	العبـــــــــارة	مدى المشاركة				
		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
١٧	يشارك معلمو هذه المدرسة في مجموعات المعلمين التي تقوم بتخطيط الأعمال التي سيتم إنجازها .	أ	ب	ج	د	هـ
١٨	يتطلع معلمو هذه المدرسة للتزود بمعلومات (تغذية مرتدة) عن أدائهم بدلاً من النظام الرسمي لتقييم الأداء .	أ	ب	ج	د	هـ
١٩	يقوم معلمو هذه المدرسة بتقييم استراتيجيات التدريس وأدوات لاختيار تلك الملائمة والمستوفية لاحتياجات التلاميذ .	أ	ب	ج	د	هـ
٢٠	يقوم معلمو هذه المدرسة بالتعاون مع زملائهم المعلمين .	أ	ب	ج	د	هـ
٢١	يشارك معلمو هذه المدرسة في برامج التدريب أثناء الخدمة وذلك حتى يتمكنوا من تحسين أدائهم داخل الصف .	أ	ب	ج	د	هـ
٢٢	يُعبر معلمو هذه المدرسة عن ثقتهم في قدرات المعلمين على تحقيق التطوير المنشود .	أ	ب	ج	د	هـ
٢٣	يبحث معلمو هذه المدرسة عن الفرص المواتية التي تختبر مهاراتهم وقدراتهم .	أ	ب	ج	د	هـ
٢٤	يقوم معلمو هذه المدرسة بدعم جهود زملائهم المعلمين .	أ	ب	ج	د	هـ
٢٥	يقوم معلمو هذه المدرسة بتقسيم المشاريع التي يقومون بتنفيذها إلى مهام ممكن إنجازها وأخرى يمكن إدارتها .	أ	ب	ج	د	هـ

Appendix Two

م	العبـــــــــارة	مدى المشاركة				
		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
٢٦	يتبادل معلمو هذه المدرسة بوضـــوح وجهـات النظر الإيجابية والمليئة بالأمل وذلك فيمـا يتعلـق بتنفيذ عملية التطوير .	أ	ب	ج	د	هـ
٢٧	يتعامل معلمو هذه المدرسة مع بعضهم البعض بكل وقار واحترام .	أ	ب	ج	د	هـ
٢٨	يجرب معلمو هـذه المدرسـة الطـرق الجديـدة ويعزمون على تنفيذها في مجال العمل حـتى ولـو كان هناك احتمال للفشل .	أ	ب	ج	د	هـ
٢٩	يمارس معلمو هذه المدرسة باستمرار القـيم الـتي يؤمن بها مدير المدرسة .	أ	ب	ج	د	هـ
٣٠	يفكر معلمو هـذه المدرسة في المستقبل ويتنبـأون بما سيكون عليه .	أ	ب	ج	د	هـ
٣١	يضع معلمو هذه المدرسة عند العمل كمجموعـة أهداف وخطط واضحة وأعمال مميزة عند تنفيذهم لجهود التطوير .	أ	ب	ج	د	هـ
٣٢	يهتم معلمو هذه المدرسة بدرجة فعالة بأعمالهم .	أ	ب	ج	د	هـ
٣٣	يتخذ معلمو هذه المدرسة الإجـراءات الكفيلـة بضمان أداء التلاميذ للامتحانات على المسـتوى المحلي والوطني بطريقة جيدة .	أ	ب	ج	د	هـ
٣٤	يوضح معلمو هذه المدرسة لبعضهم البعض بـأن نجاحهم الشخصي يمكن أن يصبح واقعي من خلال مشاركتهم في نجاح عملية التطوير .	أ	ب	ج	د	هـ

Appendix Two

م	العبـــــــــارة	مدى المشاركة				
		في حالات نادرة جداً	نادراً	أحياناً	كثيراً إلى حد ما	كثيراً أو دائماً
٣٥	يشجع معلمو هذه المدرسة بعضهم البعض على الالتزام بالقيم العامة المكتسبة .	أ	ب	ج	د	هـ
٣٦	يتنافس معلمو هذه المدرسة مع بعضهم البعض الأمور المتعلقة بنوعية المستقبل الذي يرغبون في إحداثه بهذه المدرسة .	أ	ب	ج	د	هـ
٣٧	ينفذ معلمو هذه المدرسة السياسات والقواعد والإجراءات التي تعكس قيم ومهام المدرسة .	أ	ب	ج	د	هـ
٣٨	يشجع معلمو هذه المدرسة بعضهم البعض على الشعور بارتياح تجاه ما حققوه من إنجازات مهنية .	أ	ب	ج	د	هـ
٣٩	يتطلع معلمو هذه المدرسة لطرق جديدة لتحسين ما يقومون بعمله .	أ	ب	ج	د	هـ
٤٠	يتبادل معلمو هذه المدرسة مع بعضهم البعض أحدث الممارسات والمعلومات حول التعليم .	أ	ب	ج	د	هـ
٤١	يناشد معلمو هذه المدرسة بعضهم البعض من أجل المشاركة في تصور أحلامهم حول المستقبل .	أ	ب	ج	د	هـ
٤٢	يظهر معلمو هذه المدرسة الثقة المتبادلة فيما بينهم .	أ	ب	ج	د	هـ

يرجى التأكد أنك قد أجبت على جميع الأسئلة

أرجو النظر إلى خلف الصفحة

Appendix Two

أرجو قبول شكري وتقديري على الوقت الذي بذلتموه في تكملة الاستبيان .

سنكون ممتنين لو قمتم بأخذ بعض الوقت للتعليق وإضافة ما ترونه مناسباً ويســـاهم في أهداف البحث خاصة ما يتعلق في الخطوات التي تم اتخاذها في مدرستكم لتنفيذ تطوير التعليم .

أية آراء تودون إيضاحها ستعامل بسرية وستستخدم لغرض البحث فقط .

الباحث

الرجاء عمل ملاحظاتكم في هذه الصفحة :

Appendix Three

Principal Interview Questions for Survey Follow up

1) **How do you and/or staff members communicate a positive, hopeful outlook for this school and demonstrate enthusiasm for this future state?**
2) **Can you describe any actions taken by staff members and/or you that are consistent with values shared by the members of this school? Please identify the value(s) .**
3) **Can you describe any actions taken by you that communicate to staff members your willingness to innovate and experiment, or to search for new ways to do things?**
4) **How are school staff members involved in planning and decision making? Describe specific examples of actions you have taken to make staff members feel valued and to involve them in planning and decision making.**
5) **Describe actions you have taken or incidents that have occurred that you feel facilitate and help the development of collaborative practices among your staff members?**
6) **In top-down organisations compliance is usually the standard response to new directions and programmes. Today's literature supports team structures with shared planning and decision making. The Compact calls for the sharing of leadership and accountability among building members.**

    - **Describe incidents (examples) of leadership you have seen staff members demonstrate.**
    - **Do you see teachers assuming responsibility and accountability for projects/programmes with shared planning/decision making? Are they more enthusiastic and determined to persevere and see such plans/decisions succeed? Please give examples.**

7) **Based upon your experiences with collaborative practices as defined in <u>The term Educational Reform</u>, what do you think principals should know about or acquire knowledge of to implement collaborative leadership-getting teachers to work together and with principals for educational improvement?**
8) **How do you believe collaboration and shared decision making among teachers and with principals will benefits the students and academic programmes in your school?**

Appendix Three

أسئلة موجهة لمدير المدرسة
في إطار متابعة المسح

١- كيف يتبادل أنت و/أو أعضاء هيئة التدريس وجهات النظر الإيجابية والمليئة بالأمل حول هذه المدرسة أثناء تنفيذها لجهود التطوير ، وكيف تظهر مدى تحمسك لهذا الوضع المستقبلي ؟

٢- هل يمكن أن تصف أي إجراءات اتخذتها و/أو اتخذها المعلمون كانت تتماشى مع القيم المشتركة لأعضاء هيئة التدريس بهذه المدرسة ؟ (يرجى تحديد هذه القيم) .

٣- هل يمكن أن تصف أي إجراءات اتخذتها لتوضح للمعلمين عن مدى رغبتكم في تجديد وتجربة أو البحث عن طرق جديدة لأداء العمل ؟

٤- كيف يشارك المعلمون في التخطيط وصنع القرار ؟ يرجى وصف أمثلة محددة عن الإجراءات التي اتخذتها لتجعل المعلمين يشعرون بمدى قيمتهم ولإشراكهم في التخطيط وصنع القرار .

٥- هل يمكن أن تصف الإجراءات التي اتخذتها أو الإحداث التي حدثت والتي ترى بأنها أدت إلى تسهيل والمساعدة في تطوير الممارسات المشتركة بين أعضاء هيئة التدريس ؟

٦- يعتبر الالتزام في المنظمات ذات التنظيم والرقابة والإدارة اللصيقة عادة بمثابة رد موحد للاتجاهات والبرامج الجديدة ، وأن أدبيات الوقت الحاضر تدعم نظام الفرق المبنية على المشاركة في التخطيط وصنع القرار ، كما أن التطوير يتطلب المشاركة في القيادة والمسئولية فيما بين الأعضاء .

Appendix Three

٧- بناء على خبرتكم/معرفتكم بالممارسات المشتركة وفقاً لما تم تحديده في تطوير التعليم ، هل تعتقد بأن على مدراء المدارس اكتساب المزيد من المعرفة لتنفيذ الأنشطة القيادية المشتركة .. وجعل المعلمين يتعاونون مع بعضهم البعض ومع مدراء المـــدارس في أداء العمل وذلك من أجل تحسين التعليم ؟

٨- هل تعتقد بأن التعاون بين المعلمين ومدراء المدارس وإشراكهم في صنع القرار سيعود بالنفع على التلاميذ وعلى جهود التطوير في مدرستكم ؟

Appendix Three

Teacher Interview Questions for Survey Follow Up

1) **How does your principal and/or staff members communicate a positive, hopeful outlook for this school and demonstrate enthusiasm for this future state?**
2) **Can you describe any actions taken by your principal and/or staff members that are consistent with the values shared by the members of this school? Please identify the value(s).**
3) **Can you describe any actions taken by your principal that communicate to staff members her/his willingness to innovate and experiment, or to search for new ways to do things?**
4) **How does your principal involve staff member in planning and decision making? Describe specific examples of actions your principal has taken to make staff members feel valued and to involve them in planning and decision making.**
5) **Describe actions your principal has taken or incidents that have occurred that you feel facilitate and help the development of collaborative practices among staff members?**
6) **The Educational reform calls for the sharing of leadership and accountability among building members. Please give specific examples of how this is accomplished in your school. Describe incidents (examples) of leadership you have seen staff members demonstrate.**
7) **How do you believe collaboration and shared decision making among teachers and with principals benefits the students and academic programmes in your school?**

Appendix Three

أسئلة موجهة إلى المعلم
في إطار متابعة المسح

١- هل يقوم مدير/مديرة مدرستكم و/أو المعلمين بتبادل وجهات النظر الإيجابية والمليئة بالأمل حول هذه المدرسة أثناء تنفيذها لجهود التطوير ، وهل يظهر/تظهر مدى تحمسه/تحمسها لهذا الوضع المستقبلي ؟

٢- هل يمكن أن تصف إي إجراءات اتخذها/اتخذها مدير/مديرة مدرستكم و/أو أتخذها المعلمون كانت تتماشى مع القيم المشتركة لأعضاء هيئة التدريس بهذه المدرسة ؟ (يرجى تحديد هذه القيم) .

٣- هل يمكن أن تصف إي إجراءات اتخذها/اتخذها مدير/مديرة مدرستكم و/أو أتخذها المعلمون كانت تتماشى مع القيم المشتركة لأعضاء هيئة التدريس بهذه المدرسة ؟ (يرجى تحديد هذه القيم) .

٤- كيف يقوم المدير/المديرة باشراك المعلمين في التخطيط وصنع القرار ؟ يرجى وصف أمثلة محددة عن الإجراءات التي اتخذها/اتخذها لجعل المعلمين يشعرون بمدى قيمتهم ولإشراكهم في التخطيط وصنع القرار .

٥- هل يمكن أن تصف الإجراءات التي اتخذها/اتخذها مدير/مديرة مدرستكم أو الأحداث التي حدثت والتي ترى بأنها أدت إلى تسهيل والمساعدة في تطوير الممارسات المشتركة بين أعضاء هيئة التدريس ؟

Appendix Three

٦- يتطلب التطوير المشاركة في القيادة والمسئولية فيما بين الأعضاء ، عليه يرجى إعطـــاء أمثلة محددة عن كيفية تحقيق ذلك في مدرستكم مع وصف أحداث (أمثلة) للأنشـــطة القيادية التي قام بها المعلمون .

٧- هل تعتقد بأن التعاون بين المعلمين ومدراء المدارس وإشراكهم في صنع القرار سيعود بالنفع على التلاميذ وعلى جهود التطوير في مدرستكم ؟

Appendix Four

Principal Comments of the Questionnaire

9 Regions (36 Schools)

(72 Principals) (Only 23 Principals provided comments)

No.	Region	Comments
1	(R1 P1)	The administration development methods may include every aspect of the theoretical parts. The research did not include other roles played by administration specialists such as the social specialists, the librarians and the laboratory keepers. All of whom are considered a basic element of the education reform and school administration * Most of the questionnaire questions are ambiguous and need more clarification to be answered. This denies credibility when giving views. Thus they could be worth if they were easy and close to the real field.
2		- The questionnaire covers most issues of the proposed study. - It is comprehensive. - It focuses on the importance of the relationship between the school staff. - It emphasises the effects of returning to moral values in enriching the education process.
3	(R1 P2)	This questionnaire is characterised by : - Comprehensiveness - Precision - Makes allowance for the psychological aspects. - Focuses on the effects of moral aspects.
4		Lack of school curriculum committee. Every female teacher group of the subject makes analysis and criticism to their curriculum.
5	(R2 P1)	Since the outset of the school various programmes in the development of the teacher profession were implemented, small workshops at the school level were conducted to draft the education objectives of teaching methods. In the field of students : Since the outset of school intensified lessons were being given every week on Thursdays. Outstanding students were being honoured through top students programmes.
6		The research includes all the administrative points, which contribute to the success of the educational process.
7		The school developed a programme for exchange of visits between the female teachers of all subjects.
8	(R2 P2)	First of all I would like to thank the researcher for the efforts he made and I wish him all the success. As concerning the research points, I think they are sufficient and covered all the administrative and technical aspects. We hope that the efforts exerted by the teaching staff will be honoured by the ministry through honouring the outstanding teacher.

No.	Region	Comments
9		The research includes all the administrative points which contribute to the success of the educational process.
10	(R3 P1)	I hope that the field feedback would be given more consideration prior to taking any decision or developing some education policies
11	(R3 P2)	Sound educational principles should be prepared so as to determine the levels of the students who will join the academic field in a manner that will ensure better results to all those concerned with the education learning process.
12	(R4 P1)	No school curriculum committee exists, but the contribution is made by the school administration in the educational district and followed by studies and development of the curriculum to such standard suitable to the students capabilities.
13		Lack of school curriculum committee
14		Most schools lack the school curriculum committee.
15	(R4 P2)	Lack of School curriculum committee
16		Lack of school curriculum committee
17	(R5 P1)	Item (20) is not adopted in the school
18		No comments The questionnaire is comprehensive and needs no additions
19	(R5 P2)	Item (5) and (11) are not adopted in the school
20		The questionnaire is comprehensive and includes the steps taken by our school to implement the education reform.
21	(R6 P1)	For an ideal work within the school and to achieve the projected objective, the following should be considered: 1) The principal opinion shall be heard and respected by the concerned officials as being considered in the first place as the man of the field. 2) The school principals shall be involved in the selection of expatriate teachers. 3) The general education schools shall be provided with modern teaching methods so as to cope with the rapid progress in the field of educational teaching process. 4) Large secondary schools should be provided with a suitable specialised administrative group and social specialists should be recruited and assigned to each school.

No.	Region	Comments
22	(R6 P2)	Steps taken to implement the education reform . 1) Application of observation class periods for the female teachers particularly new recruits so as to develop their skills and to benefit from the existing human experience as a source of learning resources. 2) Conducting workshops on the self learning concept and activating it within the classrooms so as to encourage students to apply this concept. 3) Issuing leaflets on the modern means and methods of teaching.
23	(R9 P1)	1) Students delay at the beginning of the school day. Continuous closure of the gate at a fixed time prior to the beginning of the assembly. Opening the gate after the assembly and the student recorded absent and the class period or assembly missing will be considered as a day of absenteeism. If the parents made a suitable apology the absenteeism will be deleted. This threatening method and accepting the parent apology gives the students and the parents an impression on the school system and its care for the students interest. 2) Students innovation of teaching methods and teachers guidance make the student confident of the subject and implant the new piece of information in the student memory. 3) The student knowledge of the laws and instructions encourages the students to desire learning.

Appendix Four

Teachers Comments of the Questionnaire

9 Regions (36 Schools)
(704 Teachers) (Only 109 Teachers provided comments)

No.	Region	Comments
1	(R4 T1)	It is difficult for the teacher to answer most of the questions due to lack of the knowledge of the principal activities and because every one occupied with his own duties. How can the teacher know the principal's self-profession development. The respect and professional relationships are comparative issues. Most of the relationships between the principal and teachers are superficial work relationships due to work pressures. All discussions between them are related to the duties and work assignment and this will not create a clear human relations and the reason behind this is the work pressure.
2		The problem lies within the centralised administration type. If there is a decentralised type the planning of administration will be better and the teachers and students conditions will improve. There are laws not suitable for the students of this country adopted by the ministry at its own discretion.
3		The principal involves all the teachers in the human aspects. Also he is involved in solving the teachers problems so that the educational process in all parts will succeed.
4		Conducting continuous administration courses to the principals, their deputies and nominees together with the methods of dealing with the teachers.
5		Lack of the school curriculum committee
6		Lack of the school curriculum committee
7		Lack of school curriculum committee stated in item (21)
8		Lack of school curriculum committee
9		Please take into consideration pressures on some male and female teachers due to accumulation of work Please use the research for the benefit of our Arab Muslim world and not for the western world and other discreditable purposes. The principal is requested to take some rapid decisions without retraction if those decisions are for the interest of the education learning process such as : To substitute the activities of the class periods of (sporting, artistry and family education) by specialisation subjects. Particularly for those subjects which need more time provided that this shall take place during the last month of the academic year only and not throughout the year.

No.	Region	Comments
10		When distributing the activities among the female teachers it should be considered that the subject serves this activity e.g. the supervisor of the tours should be the teacher of the social studies so as to determine the place and its scientific and historical benefits as being more knowledgeable than any other teacher.
11	(R4 T2)	Consideration should be given to the latest technology such as computer laboratories which should be put into action. The teacher work shall focus on his specialisation and shall not be occupied with other things which may adversely affect his performance.
12		We are progressing towards a new millennium and would like to draw attention to the use of the latest technologies such as computers and consideration should be given to data tabulation, reliance and old experiences and to concentrate on ideas rather than academic studies.
13		The education process routine, lack of consideration of the training programmes which cope with the progress and lack of adoption of latest activities all result in frustration of both the teacher and student. Consideration should be given to the training programmes for all new principals and to request them to adopt modern. Teaching methods and to reconsider the status of the teacher.
14		Lack of school curriculum committee
15		Lack of school curriculum committee
16		No curriculum committee as stated in items (5 and 11).
17		Lack of school curriculum committee
18		No school curriculum committee as stated in items (5 and 11).
19		Preferably the principal completes a questionnaire on the teacher as long as the teacher completes a questionnaire on the principal.
20		Not sure about item (28)/
21	(R5 T1)	Many of the values do not exist in the school e.g. the school curriculum committee
22		Dealing strictly with the reckless and trouble maker students or those who frequently absent themselves together with diversifying methods of punishment so as to become an example to their colleagues. The need for co-ordination of efforts between the administration and fellow teachers and to create a mutual trust among them so as to work on structural problems.

No.	Region	Comments
23		The questionnaire addressed the future of education through monitoring and forecasting, but this will not be achieved unless the principals are impelled to express their views on what is existing and what should take place. The questionnaire focused on the pedagogic role of many and completed to some extent the principal administrative authority considering that the pedagogue part will be followed by the supervisors
24		An appreciated effort but the Islamic values should be implanted in the Islamic curriculum together with stregtherning the relation between the school and the house so as to become a connecting link between the two parties, thus performing the education process in a better manner
25		1) The principal treatment to the teacher. 2) The principal appreciation to his subordinates. 3) Involvement of administration members in some issues. 4) Contribution in solving the students problems. 5) Application of justice among teachers. 6) Not to treat teachers courteously sometimes 7) Actual participation in the parents teachers council. 8) Questioning some teachers who create some problems within the school. 9) Acting with an acceptable sensible mentality during examinations period. 10) Consideration to be given to the students affairs with provision of time to study in their houses.
26		1) Some questions are ambiguous and not Clear. 2) Some questions relate to the principal not known to the teacher and it cannot be forecasted by him.
27		1) Some questions seem to be not precise in terms of drafting and contents e.g. No(41) . 2) Some measurements cannot be scientifically specified. 3) Some measurements do not meet the scientific research conditions in terms of precision such as : - "rarely"- "sometimes" and he should mention "infrequently" at times "infrequently often" Some of the requested answers, the teacher has no chance to review such as knowing the principal contribution to building sound relationship between the school and the surrounding environment
28	(R5 T2)	My evaluation to the school administrative leadership is a general evaluation of the leadership because the school administration since my appointment is not permanent and I have worked with many principals

No.	Region	Comments
29		The teacher rarely takes any decision or gives and opinion in any subject he/she only executes the decision and circulars received from the school or the directorate, he/she shall not have the right to give his/her opinion or discuss such decisions even if he/she believes they are not suitable. The teacher shall implement any measure even if he/she is not fully convinced what ever his/her opinion is. He/she is closely connected with the students and the educational process and he/she often faces situations that require reconsideration but he/she has no authority to make changes because he/she is governed by the laws and decisions.
30		I would like to mention that the curriculum committee is not the responsibility of the school. - The success of the education process is the result of a continuous interaction between three elements : the teacher, the learner, the educational knowledge, therefore focus should be on these three elements and to refrain from anything that marginal or contrary to this interaction particularly all administrative duties assigned to the teacher which will burden his/her shoulder and decreases his/her concentration on the education process. - The supporting factor which you spoke about in all the administration structure but unfortunately the principal solely distributes responsibilities I believe an advanced administrative body shall be created to regulate the whole structure. - More activation of the family role. - Updating the education curricular so as to cope with the sciences and curricular progress.
31		These steps actually still not taken but I hope they will be taken for the benefit of education reform: - More concern to be given to the teacher's educational teaching process rather than concentration on administration aspects. - More concern to be given to knowledge of the lesson to be presented to the students than concentration on secondary aspects which result in the loss of the lesson contents. - Breaking the educational process routine for the student who is occupied with seven class periods even the teacher cannot hold the student accountable for not benefiting from the library because he/she has not enough time to visit the library during the break (almost 20 minutes) . Care should be given by every fellow teacher to the application of the dialogue method in lessons together with involvement of students in making the lesson during the class period.

No.	Region	Comments
32		It is obweved that the modern educational resources are being provided to the school but a serious Islamic Education is required for the students so as to implant the moral values, encourage desire of learning to be to the level of responsibility and punctuality within the classroom. Thank you for your efforts.
33	(R7 T1)	- The principal cares for upgrading the students level of learning in all stages particularly the general secondary stage. - All the questionnaire points are good and we have no comments. -
34		- There is no enough time for the principal to adopt most of the important points mentioned in this questionnaire due to the responsibilities that burden his shoulder and the routine which governs the education process which is directed towards achieving good results regardless of the adopted method. More over most of the principals have no school administration background because they are untrained teachers and sometimes not qualified for this post , thus making use of their status . Therefore there should be set up basis for the selection of the principals not only by written or verbal tests but also through their dealings and positions in life and tests to their attitudes, values and behaviours because these are the basic elements of their work.
35	(R7 T1)	Certainly the development of the teaching methods and means is the concern of every teacher who is ambitious to upgrade his/her standard and achieve experience. Unfortunately this does not exist in our schools or in other words there is no development of the teaching process and the situation remains still since our appointment. We hope that the development process will find its way to our schools.
36		Through our day to day work with our principal we found that she respect the teachers and creates mutual trust with the teachers, in addition to addressing , caring and concentrating on education objectives, resolving teaching problems and adapted to the new developments with in the school, as well as implanting in the students good values and principals.
37		- Lack of curriculum committee . - Objective and projects are for the development of the school such as the school building or fulfilment of the cleaning competition aims.

No.	Region	Comments
38	(R7 T2)	The main objective of teaching is to create an educated knowledgeable generation appreciating its religion environment, country and human beings, but the current education is far away from its main objective and cares for other remote things. We pray to Allah All Mighty that situation will return to normal.
39		I observed through my participation with the group of teachers that we are an integrated co-operative group, but some believe working alone is some sort of independence. All the time we exchange ideas and discuss issues and projects related to improvement of the teaching field.
40	(R9 T1)	1) Data stated in page (2) decreases the chance for giving objective views by the Samples. 2) Some questions are not clear or not Understandable by the individual e.g. q(21).
41		1) To create co-operation and harmonisation among all the teaching staff. 2) To enhance the awareness of students through school projects dealing with the various aspects whether cultural, religious, social or sporting. 3) To motivate parents so as to follow-up the learning of their children through meetings of the parents council and discussion of the students problems and finding solutions to such problems. 4) To prepare policies and strategies concerning the education process inputs through visits to students and teachers in the classrooms
42	(R9 T1)	I think the expatriate principal should not complete this questionnaire because he is not concerned with the future vision of education and governed by the contract period.
43		Reform up to date is focusing on the first four classes of the basic education stage and is still not including the secondary stage.
44		To liase with the parents to discuss the role of the house in upgrading the level of the students learning . To utilise the weekly activity class period and discussion of the students problems and assisting them in finding proper solutions. - To direct the students to attentive reading by providing useful books to the library. - To encourage students to participate in the school activities groups, sports and culture clubs.

No.	Region	Comments
45		- It is important to select leading personalities for the principal post.
46		- Please appoint citizens in the post of principal rather than expatriate because of the sensitivity of this post. If the principal is an expatriate he will look into things other than education reform process. - My experience as a teacher working with both citizens and expatriates principals showed me the difference between them and our aim is for the interest of the students and school. - I hope that continuous training courses will be conducted to principals together with focusing on the new and develop education process. - The administration shall continuously be linked with the principals and those who exerted efforts to develop the education process should be honoured.
47		- The principal is also responsible for regulation of the activities within the classroom, which meet the students' requirements for understanding the lessons such as the different appliances, library books. Etc..
49		Some statements are not understandable and some proposals are not applied in the Sultanate schools.
50		Statements are not clear and some points are not found in the Sultanate schools such as the curriculum committee.
51		- Statements for comments are not understandable or ambiguous - Some points are not applied in the Sultanate schools such as the curriculum committee.
52	(R9 T1)	- Statements are not specified, not clear and somewhat ambiguous. - Some ideas or elements currently not applied in our schools.
53	(R9 T2)	Mastering the subject is the basis for the teacher success together with the experience in the sequence of events and presenting them to the students in an understandable manner.
54		Lack of meeting of the teachers of some subjects in one room and the considerable number of class periods for some teachers minimises discussion of the reform issues. Also lack of periodicals and new education books in the library and disagreements among the teachers also prevent discussions.

No.	Region	Comments
55		Answering the questions could be in such a way contrary to the stated in the questionnaire, therefore I suggest a space to be provided for different opinions.
56		The Omani teacher should be instructed to bear his responsibilities towards his country because he is the leader of the education process, hence he should bear all the burdens in order to be capable of fulfilling any reform and gradually manage without the expatriates, as well as to endeavour for the progress of his country and he should leave his duties whatever they are to be carried out by others.
57		To implement the education reform the teacher should be developed i.e. to get acquainted with the latest methods of presenting the subject in such a way different from the present method practiced by various teachers due to lack of training course which equip the teacher with the latest methods and technologies so as to innovate supporting methods for the education reform. It should be noted that even if the training courses are short but they are a mental refereshment and as I believe they are essential means for education reform.
58		Lack of school curriculum committee.
59		- Statements are not specified, not clear and somewhat ambiguous. - Some ideas or elements are not applied in our schools.
60	R8(T1)	- The principal needs both moral and material support from the concerned authorities so as to confront the school problems related to the students. - He should have sufficient power to strictly enforce decisions related to the students problems and behaviors so that the students will feel that the matter is serious, thus they will think twice of their behavioral manners. This will lead to school stabilization and improve the education process.

No.	Region	Comments
61	R8(T1)	- For the success of the education process, the administration should take care of the curricular problems and those faced by the teacher, as well as to decrease the load on teachers and give concern to the students and school problems. - The principal and teachers shall deal with each other as equals. Principal shall have the power to take decisions regarding disruptive students and those who do not regularly attend class periods, this will help in enhancing the educational process.
62		The questionnaire items are very good and to implement them in real life is a difficult task and remains ideal in some aspects if we take the principal actual and natural conditions into consideration. - An ideal condition should be provided for the school for the success of these items i.e. students.....etc, therefore the following items shall be added: - Density, teaching framework suitable preparations to add a moral incentive so that these items could be applied. - Extend of the principal surrounding social environment to assist in the implementation of such ideal items.
63	R8 (T1)	1. The principal should involve the parents and held meetings with them. 2. The principal should involve and inform the parents council. 3. The principal should enhance mutual trust between the school administration, teachers and students. 4. The principal should respect the opinions of both teachers and students. 5. The principal should spur the students and inform them of the importance of studying. 6. The school should seek solutions to the students problems. 7. The principal should develop the school activities. " Some paragraphs and items are related to the educational and administrative supervisors".
64	R8 (T1)	To determine the basic objective of the educational process is difficult due to the various attributers and also because it is subject to a personal view of the school administrations, thus it differs from one place to another.
65		The school is carrying out many projects which I believe are useful to the educational process such as the following but not limited to: 1- Culture Day 2- Open Day 3- Exhibitions and workshops 4- Workshops to produce aid that serve the curricular. 5- Workshops to stuff animal carcass and preservation of animals and insects. 6- Charitable Suq. 7- Awareness campaigns. 8- Scientific Tours. 9- Exchange of visits.

No.	Region	Comments
66	R8 (T2)	- The teacher needs lessening of the administrative load and different records to dedicate oneself to the promotion and improvement of education and preparation of suitable teaching methods. He also needs training courses and workshops, in addition to equip him with appliances and different teaching techniques and methods so that efforts shall not be individual and scattered.
67		- To make the teacher follow-up and pay attention to the curricular development process and other aspects his administrative load should be decreased, as well as training courses and workshops should be increased so as to get acquainted with the contemporary developments in the field of education.
68		- There are some paragraphs not related to the teacher and they may be related to the principal, the supervisor or the first teacher "coordinator". 1- Concern given by the teacher to the subject he taught. 2- Teacher respect to the good example which he should follow. 3- Cooperation between the teacher and his students and respect of their views. 4- To link the teacher with real life. 5- To develop and strengthen bonds of affection between the teacher, students and the work he practices. 6- The teacher to guide students to obtain self-trust. 7- To establishment relationship between the parents and school.
69		- Reform of education process through the use of modern methods of teaching such as: 1. Group work. 2. Exploration and investigation. 3. Mental agitation. - In addition to adoption of the latest education reform plans and concentration on the students activities and not the teacher ones to get rid of the dictation method and to promote the modern scientific method of effective teaching.
70	R8 (T2)	One) The education reform cannot be achieved unless through the co-operation between several bodies and the teacher the most important are: 1- Education principal. 2- Local people and dignitaries. b) I hope that the means and methods of assessment will be reconsidered because the student aim is to succeed at the end of each term by any means (cheating) without making any efforts to study, co-operating with the teachers and respecting the.

No.	Region	Comments
71		- We hope that the curricular and methods of presentation of such curricular will be reconsidered so that they will depend on thinking and discussion more than memorisation and dictation, thus the problem faced by the student will be one that he will tackle through his mind. - Provision of the modern learning resources and methods to the teachers...etc, which contribute and serve the education reform process. Teacher should join courses in various fields so as to cope with the development of the various methods mentioned above and the development of the curriculum, which he taught. The teachers should be provided with incentives so as to contribute in the education reform process through diverse activities. - Also students should be given incentives because the education process constitutes of teacher, student and curriculum and all these elements are complementary to each other.
72		- Insufficient computers. - Presentation of scientific programs and films on the library TV is not followed by sufficient discussion by the students due to shortage of time and the length of curriculum which take most of the students time. - The prevailing values is to succeed and obtain high marks so as to join the university, this makes the teachers and parents somewhat hanging on the old curricular fearing from their development which to them it means they will be difficult.
73		An item or items on the participation of the teacher and not the practice and application of the education reform only, training methods or the curriculum to upgrade the efficiency of the education process to be added.
74		- An actual cooperation between the school administration, the resources coordinators and teachers exist in relations to all the educational policy plans within the school. Also the school administration encourages teachers in this respect. - To implement the future education policy the contribution of the Ministry is needed in terms of modern teaching aids, which is concerned with achieving success.
75	**R6 (T1)** R6	I would like to advise the researcher of the following points: - To carry out field visits to the secondary schools so as to review the education process. - To benefit from the latest studies and researches in the fields of education psychology and sociology. - To be distinguished by reality and scientific objectivity in the study and to observe the society values moral issues, prevailing behaviors and knowledge modes.

No.	Region	Comments
76		1- Many questions were answered without being sure they happen within the school. 2- Lack of school curriculum committee. 3- The school is managed by a traditional method and over crowded; thus some standards mentioned in the questionnaire are not applicable. 4- The great number of teachers of different nationalities will not allow the teachers to get in touch with each other as well as with the school administration and to enhance the relationships. 5- Many teachers are concerned with the academic aspect only and not building good relations with the school administration, they only receive instructions and implement them as on administrative obligations only. 6- Periodic meetings between the teachers and the school administration only focus on the administrative duties of the teacher and no serious discussion to determine the problems faced by the teacher and how to tackle them. 7- The age difference between the principal and the teacher and its impact on their relationship and the ability of the teacher to precisely evaluate the administrative body. 8- Neither the school administration nor the teachers have any relation with regards to the preparation of curricular.
77	R6 **(T1)**	- I wish that part of the research to be devoted to self-learning. - More practical educational activities in the field of science particularly expansion of the laboratories period practice in the labs should be in the form of groups and not display of activities and experiments.
78	R6 (T1)	- Class periods for strengthening the level of weak students should be given. - Conducting seminars to aware students whether on religion or cultural and social.
79		- The principal is spending money on all activities of the school including teaching methods from her own pocket which lead to the enhancement of the learning aids section in the school and other educational activities. Particularly the library so as to provides the best services to both teachers and students, hence enhancing the educational process in the school.
80		- In the field of preparing objectives and plans and distinguished works, workshops were made to provide teachers with new experiences in the field of preparing objectives, and how to teach by producing teaching aids. Training them on how to use hydrojector and projectors, how to make slides by a positive film. Also a workshop on teaching methods of science and Arabic language. - Also a workshop on problems solving methods and other various means used in problem solving.
81	R6**(T1)**	- As concerning (5) and (II) there is no school curriculum committee.

No.	Region	Comments
82	R6 (T2)	I would like to advise the researcher of the following points: - To carry out field visits to the secondary schools so as to review the education process. - To benefit from the latest studies and researches in the fields of education psychology and sociology. - To be distinguished by reality and scientific objectivity in the study and to observe the society values, moral issues, prevailing behaviours and knowledge modes.
83		1- Lack of school curriculum committee. 2- Teachers of different nationalities and opinions make the discussion difficult. 3- Great number of different nationalities and being in harmony with each other should be observed. 4- Many points cannot be assessed in a proper manner because of lack of suitable opportunities for discussions with teachers.
84		- Modern learning strategy particularly self-learning is preferable. - Focus on practical activities with allocation of class periods that coincide with the students trends and inclinations.
85		- Tours to cultural sites. - Different camping activities.
86		More concern should be given to teachers through the following: - Continuous training courses. - To follow-up technological developments and to benefit from it in the reform of the education process. - To inform him of the latest education researches so as to benefit from them.
87		- Regular training courses in the use of the latest technologies such as computers in teaching process should be conduct at the regional level. This will provide both teacher and students with skills in addition to cope with the latest technologies of our current time. This also will require providing all schools with a large number of computers together with the provision of internet to each large school in Willayat. - A post similar to the laboratory and library keeper for the computers should be created and he should be provided with the latest computer and internet newsletters and books. - This will benefit the process and the students who will review the latest global progress in science and expand his knowledge.
88		- All teachers of different subjects in the school conduct observation class periods for each other. Also meetings of the subject teachers are held every week to discuss issues and take proper actions. Moreover meetings are held to gather together teachers and to discuss various educational and curricular issues for benefit and to investigate important points of the curriculum and to discuss the latest methods so as to improve the reform efforts in the school.

No.	Region	Comments
89	(R1) - (T1)	- Many statements we are not exposed to in the school, this it is difficult to answer them.
90		- Practical experience in dealing with the principal and many class periods, as well as being occupied by the laboratory work.
91		- Lack of school curriculum committees (no. 5,11).
92		- May be the answers I provided for some questions do not reflect the actual life because I recent joined the school and have little Knowledge of the principal.
93		- Future vision is the slogan of all the school staff as they feel it is their school and must maintain it and endeavor for its progress and future and the level of the student is the concern of all.
94		- As concerning the training programmes for the principal, they are rare and we frequently hear about such programmes - If they exist many will change. - There is a point on the relationship between the principal and teacher and it's a vital point this relationship should exceed the formal limits.
95		- I think the teacher depends on the principal's method of administration to carry out his duties. - The most problems we face here are related to the solitary decisions regarding the school without giving a change to the teacher to express his opinion and the decision is exclusively taken by the principal.
96		- Some items relate to things not existing in the school, this any judgement will not be in consistency with reality and will not achieve the expected results.
97		- The most important steps, which the school administration focused on during this year, are the activation of the observation class periods or what is called medal lessons . There are conducted after the class period to discuss the advantages and disadvantages of the class period hopping that will have amagor role in the education reform. Its fruits are being picked although we are still in the second month of the academic year. - To pave way for students through the school activities, material and moral encouragement which is required for such activities.

No.	Region	Comments
98		- The principal method of dealing should be free from previous judgements on the teacher. They should directly deal with each other without mediations, which (for one reason or another) adversely affect the relationship with the principal resulting in the slow down of the education reform process. Also some teachers should give more attention to their role in the school particularly enhancement of the student leaving level rather than muddling the teachers relationships which adversely impact the progress of the education process.
99		- The principal is an ideal person escorting all his efforts for the service of all school, teachers and students. He is respectable with high moral standards capable of school administration in all conditions, working and participating in the development and progress of the school to reach higher standards. I appreciate him and hope every school principal in the Sultanate will follow his example.
100	R1 T(2)	- Lack of school curriculum committees. We believe this the responsibility of the Ministry, which follows-up and evaluate the curriculum.
101		- Lack of school curriculum committee.
102		- Lack of school curriculum committee.
103		- Lack of school curriculum committee.
104		- The education in the Sultanate burdens the shoulders of the teacher through technical and administrative issues, this reducing the efficiency of his academic performance, which serves the students.
105		- Please take into consideration the administrative hierarchy, because it is difficult for the principal of large schools with high students density and increasing number of teachers to manage such school alone, but with the administrative hierarchy of his assistant (more than one) chaired by the principal the students, teachers and even the buildings can be managed.
106		- We believe that many of the questions should more specific so as to give an objective opinion, because some of them the person will hesitate in answering them. The questionnaire is a good effort and significant and will be of good return whether to the researcher or later on when implemented.
107		- Item (5) not applicable. - The questionnaire included financial items if applied in schools they will become model schools. - Concern is given to formalities in the school and nonviual issues come later on. - The questionnaire is a good research looking into the education with a new perspective, we hope that we will be able to see its fruits.

No.	Region	Comments
108	R1 (T2)	- Items dealing with achievement of the principal and school values if they coincide with my values no doubt I will try to achieve them, but those which I disagree with them not necessarily to be achieved (29-37). - In service training programmes almost nill (21). - Lack of school curriculum committee.
109		As concerning item (10) lack of school curriculum committee and not applicable in all schools of the Sultanate. Also nonexistence of many plans to develop the bases and measures which reflect the school values and duties.

Appendix Five

Mean (±SD) teachers perceptions of principals' leadership behaviour by district, gender and nationality.

District	School	Nationality	Leadership Factor						
			Accountability	Collaboration	Improvement	Relationship	Values	Vision	TOTAL
	M1	Omani	28.2 (1.8)	30.2 (3.9)	27.2 (5.4)	30.7 (2.8)	30.2 (4.5)	28.7 (4.9)	175.4 (22.6)
		non-Omani	29.6 (1.7)	30.8 (2.0)	25.8 (3.9)	29.8 (1.9)	29.6 (2.7)	28.6 (3.0)	174.5 (10.5)
	M2	Omani	26.7 (5.3)	28.0 (4.2)	23.0 (5.6)	28.5 (4.9)	25.5 (2.1)	26.0 (4.2)	157.7 (26.5)
		non-Omani	31.4 (1.7)	32.5 (2.7)	31.0 (3.1)	32.1 (2.6)	32.4 (1.5)	31.1 (1.5)	190.7 (11.6)
	F1	Omani	25.6 (4.0)	27.5 (4.0)	23.4 (4.3)	28.1 (3.9)	26.8 (3.3)	23.8 (3.7)	155.2 (21.5)
		non-Omani	-	-	-	-	-	-	-
	F2	Omani	24.5 (5.6)	21.7 (8.2)	22.6 (5.3)	21.5 (7.1)	22.1 (5.4)	22.0 (6.2)	134.6 (34.6)
		non-Omani	21.0 (7.2)	18.7 (5.8)	19.3 (7.0)	19.6 (5.6)	20.0 (7.5)	14.3 (4.0)	113.0 (35.9)
D2	M1	Omani	28.0 (1.7)	29.0 (4.3)	25.3 (3.7)	28.7 (3.5)	30.0 (1.7)	28.0 (6.0)	169.0 (19.9)
		non-Omani	29.1 (2.3)	27.6 (3.0)	27.8 (3.8)	28.5 (3.0)	27.6 (3.9)	27.6 (3.7)	168.5 (16.6)
	M2	Omani	29.5 (2.1)	27.9 (2.9)	29.5 (0.7)	29.0 (1.4)	30.0 (2.8)	27.8 (5.8)	173.7 (13.0)
		non-Omani	28.2 (4.3)	26.0 (4.7)	24.5 (4.9)	26.0 (3.8)	30.4 (3.5)	26.8 (3.0)	162.0 (22.5)
	F1	Omani	19.8 (5.4)	20.2 (7.2)	17.8 (5.2)	21.7 (5.1)	18.8 (4.4)	17.3 (6.3)	115.9 (31.6)
		non-Omani	29.5 (2.1)	30.5 (3.5)	31.5 (2.1)	30.5 (2.1)	30.0 (0.0)	30.0 (1.4)	182.0 (11.3)
	F2	Omani	25.0 (2.4)	22.6 (3.6)	24.2 (3.6)	24.7 (1.5)	26.7 (2.7)	23.2 (1.5)	146.6 (9.9)
		non-Omani	29.5 (5.7)	29.2 (5.2)	28.0 (2.4)	27.5 (5.0)	27.7 (4.5)	28.7 (1.8)	170.7 (23.9)
D3	M1	Omani	-	-	-	-	-	-	-
		non-Omani	29.0 (4.3)	29.0 (4.2)	25.1 (6.0)	28.0 (3.9)	27.9 (3.6)	25.8 (5.5)	164.9 (26.1)
	M2	Omani	-	-	-	-	-	-	-
		non-Omani	28.9 (6.3)	29.0 (6.1)	27.0 (7.5)	29.5 (4.9)	29.1 (6.1)	28.3 (7.6)	171.9 (37.7)
	F1	Omani	28.2 (3.3)	28.3 (2.7)	25.2 (3.6)	28.8 (3.4)	28.3 (2.6)	28.5 (2.4)	167.6 (14.9)
		non-Omani	30.5 (.71)	30.9 (1.5)	25.0 (4.2)	31.5 (2.1)	30.5 (3.5)	31.0 (2.8)	179.4 (6.2)
D3	F2	Omani	29.1 (2.7)	28.6 (3.7)	26.3 (5.0)	30.0 (4.2)	29.0 (4.3)	28.1 (4.7)	171.3 (23.4)
		non-Omani	30.7 (1.5)	31.7 (1.5)	29.3 (3.3)	30.5 (2.8)	31.0 (4.3)	29.5 (3.7)	182.8 (14.1)
D4	M1	Omani	30.0 (-)	28.0 (-)	26.0 (-)	29.0 (-)	24.0 (-)	28.0 (-)	165 (-)
		non-Omani	27.8 (3.9)	28.7 (5.6)	26.7 (4.8)	28.3 (4.4)	29.2 (3.2)	26.2 (4.2)	167.1 (24.6)
	M2	Omani	31.8 (2.4)	31.0 (3.4)	28.7 (3.9)	31.5 (3.7)	30.1 (4.3)	29.2 (4.6)	181.8 (21.7)
		non-Omani	31.8 (2.4)	31.8 (3.3)	28.5 (5.2)	31.2 (1.5)	30.8 (3.2)	29.8 (2.1)	184.0 (16.1)
	F1	Omani	23.0 (4.4)	22.8 (6.3)	21.8 (2.9)	24.8 (2.7)	22.4 (5.9)	20.1 (5.0)	135.1 (24.0)
		non-Omani	25.0 (3.5)	28.4 (2.1)	22.2 (5.3)	26.7 (1.7)	26.0 (2.1)	26.5 (5.0)	154.9 (18.4)

District	School	Nationality	Leadership Factor						
			Accountability	Collaboration	Improvement	Relationship	Values	Vision	TOTAL
D4	F2	Omani	27.2 (3.9)	27.2 (3.5)	24.5 (2.2)	27.4 (2.3)	28.4 (2.0)	24.2 (4.0)	159.2 (14.4)
		Non-Omani	27.6 (3.2)	27.0 (5.5)	23.8 (4.6)	27.6 (1.5)	24.6 (5.0)	23.0 (5.2)	153.8 (22.5)
D5	M1	Omani	27.0 (3.6)	23.3 (2.0)	23.0 (1.7)	28.6 (2.0)	28.0 (1.7)	25.3 (0.5)	155.3 (3.0)
		non-Omani	29.8 (2.5)	28.2 (4.7)	27.4 (5.6)	28.7 (4.3)	31.4 (1.6)	29.2 (3.6)	175.0 (19.4)
	M2	Omani	26.1 (3.7)	27.0 (3.7)	24.6 (3.1)	26.1 (5.0)	26.0(4.9)	22.6 (6.1)	152.6 (25.4)
		non-Omani	30.6 (2.8)	29.0 (6.0)	29.5 (3.7)	32.0 (3.6)	28.0 (7.0)	26.1 (6.6)	175.4 (28.9)
	F1	Omani	23.2 (5.6)	23.8 (5.6)	21.5 (3.6)	24.2 (5.2)	22.0 (4.4)	19.6 (4.0)	134.4 (25.4)
		non-Omani	29.7 (4.5)	27.6 (7.7)	22.9 (3.6)	27.1 (5.2)	27.9 (5.4)	24.7 (5.5)	160.1 (29.6)
	F2	Omani	28.5 (2.8)	30.1 (3.6)	25.6 (3.2)	29.6 (3.0)	27.5 (3.6)	27.3 (3.2)	168.8 (17.6)
		non-Omani	27.3 (1.9)	25.5 (4.9)	28.0 (4.2)	28.0 (2.8)	30.1 (0.2)	25.5 (6.3)	164.5 (20.0)
	F1	Omani	26.7 (4.1)	23.0 (4.6)	24.6 (4.5)	24.5 (3.4)	25.6 (3.1)	21.3 (3.7)	146.0 (19.2)
		non-Omani	-	-	-	-	-	-	-
	F2	Omani	25.8 (4.4)	25.2 (4.6)	21.5 (5.3)	25.0 (4.7)	24.9 (5.2)	23.4 (3.4)	145.8 (25.8)
		non-Omani	-	-	-	-	-	-	-
D8	M1	Omani	32.0 (-)	34.0 (-)	31.0 (-)	33.0 (-)	32.0 (-)	31.0 (-)	193.0 (-)
		non-Omani	30.6 (2.7)	33.0 (2.6)	28.4 (3.5)	31.4 (2.6)	31.3 (2.4)	30.6 (3.2)	185.5 (14.4)
	M2	Omani	29.1 (2.1)	30.5 (1.0)	27.0 (2.9)	30.5 (2.3)	29.6 (2.8)	29.5 (2.4)	176.3 (5.5)
		non-Omani	26.5 (2.6)	29.2 (4.9)	26.8 (4.6)	29.2 (5.1)	29.7 (2.9)	26.2 (3.4)	167.9 (22.2)
	F1	Omani	25.8 (6.5)	25.4 (4.6)	23.8 (5.8)	28.0 (3.9)	25.6 (4.5)	23.2 (6.4)	151.8 (30.3)
		non-Omani	28.7 (2.2)	28.0 (3.3)	27.2 (3.7)	28.5 (4.4)	29.0 (3.5)	28.0 (3.8)	169.5 (19.1)
	F2	Omani	26.0 (6.6)	26.3 (5.5)	26.7 (6.2)	26.9 (4.5)	27.5 (2.9)	26.8 (4.4)	160.3 (27.6)
		non-Omani	31.5 (3.1)	30.2 (2.8)	28.7 (3.1)	30.0 (2.9)	30.2 (3.8)	30.2 (2.8)	181.0 (17.0)
D9	M1	Omani	27.0 (2.8)	26.5 (3.5)	23.0 (1.4)	27.5 (3.5)	29.5 (0.7)	23.4 (5.0)	156.9 (14.2)
		non-Omani	26.4 (5.4)	28.5 (4.4)	23.2 (4.9)	27.2 (5.9)	27.3 (4.2)	24.4 (6.0)	157.2 (29.8)

District	School	Nationality	Leadership Factor						
			Accountability	Collaboration	Improvement	Relationship	Values	Vision	TOTAL
D9	M2	Omani	25.6 (7.4)	26.4 (4.0)	25.4 (3.6)	27.4 (4.3)	26.8 (4.9)	23.2 (9.1)	154.8 (30.8)
		non-Omani	24.3 (6.2)	27.1 (5.8)	24.8 (5.0)	25.6 (3.3)	26.4 (6.1)	24.8 (6.8)	153.0 (31.5)
	F1	Omani	25.0 (-)	20.0 (-)	23.0 (-)	21.0 (-)	23.0 (-)	19.0 (-)	131.0 (-)
		non-Omani	§23.3 (4.1)	§22.6 (4.5)	§21.2 (4.8)	§23.3 (3.7)	§22.0 (5.1)	§19.7 (5.9)	§132.4 (25.4)
	F2	(All[a])	31.1 (3.2)	31.8 (2.2)	30.6 (2.7)	31.7 (2.5)	29.7 (3.8)	30.2 (4.4)	185.3 (17.1)
MEAN TOTAL[b]			27.8 (4.7)	27.9 (5.2)	25.8 (5.0)	28.1 (4.5)	27.9 (4.7)	26.3 (5.6)	164.2 (27.5)

[a]Demographic information from school D9-F2 is missing. These values are the means of all teachers at that school.

[b] mean totals are averaged over all variables.

MANOVA results for teachers' perceptions of Principal Leadership.

Sources of Variability	F-statistic	d.f.	Significance of F
Within Subjects			
Gender by Nationality by Factors	0.35	5 315	p > .05
Nationality by Factors	2.96	5 315	P < .01
Gender by Factors	2.24	5 315	p < .05
Factors	50.04	5 315	p < .01
Between Subjects			
Gender by Nationality	1.06	1 319	p > .05
Gender	5.95	1 319	P < .05
Nationality	11.46	1319	p < .01

Mean (±SD) Principal Leadership scores by factor and gender for teachers.

Factor	Gender		Total
	Male (N=173)	Female (N=175)	N=348
Accountability	28.7 (4.2)	27.0 (5.1)	27.8 (4.7)
Collaboration	29.2 (4.4)	26.7 (5.6)	27.9 (5.2)
Improvement	26.7 (4.8)	24.9 (5.1)	25.8 (5.0)
Relationships	29.2 (4.0)	27.1 (4.7)	28.1 (4.5)
Values	29.3 (4.1)	26.6 (4.9)	27.9 (4.7)
Vision	27.5 (5.1)	25.1 (5.8)	26.3 (5.6)
TOTAL	170.7 (24.3)	157.7 (29.0)	164.2 (27.5)

Mean (±SD) Principal Leadership scores by factor and nationality for teachers.

Factor	Nationality		Total
	Omani (N=164)	Non-Omani (N=159)	N=323
Accountability	26.8 (4.7)	29.0 (4.4)	27.8 (4.7)
Collab oration	26.7 (5.2)	29.2 (4.8)	27.9 (5.2)
Improvement	24.6 (4.7)	27.0 (5.0)	25.8 (5.0)
Relationships	27.3 (4.6)	29.0 (4.3)	28.1 (4.5)
Values	26.7 (4.6)	29.3 (4.3)	27.9 (4.7)
Vision	25.0 (5.4)	27.7 (5.3)	26.3 (5.6)
TOTAL	157.4 (26.8)	171.6 (25.9)	164.2 (27.5)

Mean (±SD) teachers perceptions of their own leadership behaviour by district, gender and nationality.

District	School	Nationality	Leadership Factor						
			Accountability	Collaboration	Improvement	Relationship	Values	Vision	TOTAL
D1	M1	Omani	30.0 (3.1)	28.5 (3.3)	27.5 (3.8)	29.7 (3.4)	28.5 (5.0)	25.0 (5.8)	169.2 (21.2)
		non-Omani	29+8 (3.6)	30.8 (2.3)	30.0 (2.6)	31.1 (1.7)	29.3 (3.4)	29.0 (4.4)	180.1 (13.6)
	M2	Omani	24.0 (2.8)	23.5 (0.7)	25.0 (1.4)	26.5 (0.7)	26.5 (2.1)	24.5 (4.9)	150.0 (12.7)
		non-Omani	30.8 (2.9)	28.5 (4.9)	30.2 (2.6)	30.8 (3.6)	31.1 (2.0)	29.8 (2.1)	181.5 (17.4)
	F1	Omani	29.6 (1.7)	25.7 (2.6)	27.7 (3.2)	28.2 (3.2)	28.0 (2.3)	26.0 (2.7)	165.2 (12.1)
		non-Omani	-	-	-	-	-	-	-
	F2	Omani	30.1 (3.8)	27.3 (5.5)	29.0 (4.7)	29.4 (2.4)	28.8 (4.9)	27.8 (4.1)	172.5 (24.5)
		non-Omani	23.3 (10.0)	20.6 (10.0)	23.3 (9.8)	23.3 (9.0)	20.6 (12.2)	20.3 (11.0)	131.6 (60.0)
D2	M1	Omani	28.3 (3.5)	25.0 (4.5)	29.0 (5.2)	27.3 (3.7)	27.6 (4.1)	26.0 (5.0)	163.3 (24.0)
		non-Omani	31.1 (3.4)	28.6 (3.4)	29.5 (3.0)	30.3 (3.8)	30.6 (0.8)	28.3 (2.4)	178.6 (13.9)
	M2	Omani	30.5 (0.6)	28.5 (3.5)	29.3 (2.4)	25.0 (2.8)	26.9 (1.5)	27.0 (7.0)	167.2 (18.0)
		non-Omani	28.0 (2.7)	25.8 (3.2)	24.6 (2.7)	27.8 (3.0)	26.8 (2.7)	24.0 (5.2)	157.2 (17.5)
	F1	Omani	28.0 (3.0)	20.7 (4.0)	25.5 (1.4)	25.4 (3.0)	22.7 (3.4)	23.7 (4.7)	146.1 (13.6)
		non-Omani	31.5 (2.1)	25.5 (7.7)	31.0 (2.8)	32.0 (0.0)	30.5 (4.9)	26.5 (3.5)	177.0 (21.2)
	F2	Omani	30.2 (3.5)	26.8 (1.6)	28.2 (3.8)	30.0 (2.5)	29.2 (4.4)	28.5 (4.2)	173.1 (18.6)
		non-Omani	28.0 (2.8)	26.7 (4.5)	25.2 (3.8)	27.2 (2.6)	26.7 (3.7)	24.0 (5.6)	158.0 (21.3)
D3	M1	Omani	-	-	-	-	-	-	-
D3	M1	non-Omani	28.1 (2.0)	25.9 (3.3)	26.6 (4.1)	27.7 (3.9)	26.8 (3.8)	24.8 (4.6)	160.1 (17.0)
	M2	Omani	-	-	-	-	-	-	-
		non-Omani	30.1 (2.3)	27.6 (4.8)	29.9 (4.0)	29.0 (3.6)	29.2 (3.4)	28.1 (4.8)	174.0 (20.7)
D3	F1	Omani	30.6 (2.5)	26.6 (2.9)	28.6 (2.5)	27.4 (2.4)	27.2 (1.5)	25.0 (5.3)	165.7 (13.6)
		non-Omani	30.5 (2.1)	28.1 (4.4)	30.5 (2.1)	25.5 (0.7)	28.5 (3.5)	29.5 (0.7)	172.6 (12.2)
	F2	Omani	30.5 (2.8)	28.0 (4.9)	30.1 (5.6)	29.0 (5.4)	28.1 (3.1)	29.0 (3.5)	174.8 (23.3)
		non-Omani	29.7 (2.8)	27.2 (5.6)	29.2 (3.3)	28.7 (3.7)	27.7 (4.7)	25.7 (4.4)	168.5 (24.1)
D4	M1	Omani	32.0 (-)	18.0 (-)	29.0 (-)	28.0 (-)	30.0 (-)	25.0 (-)	162.0 (-)
		non-Omani	29.7 (2.7)	28.2 (5.4)	29.7 (3.4)	29.0 (4.6)	29.2 (2.9)	28.0 (3.6)	174.0 (20.7)

District	School	Nationality	Leadership Factor						
			Accountability	Collaboration	Improvement	Relationship	Values	Vision	TOTAL
	M2	Omani	32.2 (1.5)	30.4 (2.8)	28.2 (4.0)	31.5 (2.3)	30.2 (3.2)	30.3 (2.6)	182.9 (15.4)
		Non-Omani	31.4 (3.5)	31.4 (3.5)	31.2 (4.0)	31.4 (3.2)	33.0 (2.4)	32.2 (3.0)	190.6 (18.7)
	F1	Omani	30.9 (1.7)	25.4 (2.1)	27.0 (2.1)	28.1 (2.0)	26.0 (3.3)	26.0 (2.6)	163.5 (9.6)
		non-Omani	32.2 (3.5)	30.1 (1.4)	31.2 (1.7)	29.2 (2.2)	31.5 (1.2)	32.0 (1.6)	186.4 (6.9)
	F2	Omani	28.7 (4.1)	26.1 (5.6)	26.5 (2.7)	27.5 (2.2)	25.4 (4.5)	23.5 (6.0)	157.9 (22.1)
		non-Omani	27.5 (2.1)	26.3 (7.5)	26.0 (11.3)	29.5 (6.3)	25.5 (7.7)	25.5 (10.6)	160.3 (45.7)
D5	M1	Omani	27.0 (3.6)	23.0 (2.6)	26.3 (5.1)	28.0 (4.5)	25.3 (5.7)	26.0 (5.2)	155.6 (25.9)
		non-Omani	29.0 (2.5)	26.1 (1.3)	30.1 (2.7)	30.1 (1.2)	28.8 (1.8)	27.5 (3.2)	171.8 (7.7)
D5	M2	Omani	29.5 (3.2)	28.8 (2.7)	29.8 (3.4)	30.0 (2.5)	29.8 (3.4)	27.8 (3.6)	175.8 (17.4)
		non-Omani	24.0 (-)	29.0 (-)	30.0 (-)	25.0 (-)	27.0 (-)	21.0 (-)	156.4 (-)
	F1	Omani	25.4 (4.3)	24.0 (4.3)	24.0 (5.6)	26.0 (2.7)	22.2 (3.1)	21.4 (4.5)	143.0 (22.5)
		non-Omani	29.7 (3.9)	27.2 (3.6)	30.0 (2.4)	28.8 (0.8)	26.9 (2.0)	26.0 (3.9)	168.7 (7.9)
	F2	Omani	28.1 (2.7)	25.5 (3.0)	26.8 (1.0)	29.0 (2.3)	28.1 (1.9)	26.7 (2.8)	164.4 (3.6)
		non-Omani	30.0 (-)	30.0 (-)	24.0 (-)	25.0 (-)	22.0 (-)	23.0 (-)	154.0 (-)
D6	M1	Omani	-	-	-	-	-	-	-
		non-Omani	30.5 (2.5)	28.8 (3.4)	30.2 (2.1)	29.5 (3.7)	30.8 (3.9)	27.7 (5.6)	177.7 (19.1)
	M2	Omani	-	-	-	-	-	-	-
		non-Omani	31.1 (2.9)	29.7 (4.7)	30.9 (3.3)	30.4 (4.8)	31.7 (3.6)	28.7 (4.9)	182.5 (22.3)
	F1	Omani	30.8 (1.4)	28.8 (2.7)	30.7 (2.5)	30.0 (2.5)	30.3 (3.3)	30.4 (3.9)	181.0 (12.7)
		non-Omani	-	-	-	-	-	-	-
	F2	Omani	32.8 (2.6)	31.0 (2.9)	29.8 (3.6)	30.0 (3.0)	29.8 (3.7)	29.8 (4.5)	183.2 (19.1)
		non-Omani	31.2 (2.0)	32.8 (1.7)	31.7 (1.7)	31.9 (2.2)	31.5 (2.2)	30.9 (2.5)	190.1 (9.0)
D7	M1	Omani	27.8 (2.5)	26.9 (2.6)	27.2 (2.4)	29.0 (2.4)	29.0 (2.7)	28.0 (3.3)	167.9 (14.5)
		non-Omani	31.8 (3.1)	28.6 (4.9)	29.2 (5.0)	29.7 (3.2)	29.0 (3.3)	29.0 (4.7)	177.3 (22.2)

District	School	Nationality	Leadership Factor						
			Accountability	Collaboration	Improvement	Relationship	Values	Vision	TOTAL
D7	M2	Omani	28.1 (3.0)	26.1 (3.5)	27.4 (3.3)	27.0 (3.2)	27.5 (3.2)	26.5 (3.2)	162.9 (14.9)
		non-Omani	31.3 (2.3)	30.3 (1.1)	31.6 (1.5)	32.3 (3.0)	30.6 (2.5)	29.3 (3.5)	185.6 (11.9)
	F1	Omani	28.3 (2.3)	27.3 (3.5)	26.8 (2.4)	28.9 (2.7)	27.3 (4.9)	24.0 (4.6)	162.8 (16.6)
		non-Omani	-	-	-	-	-	-	-
	F2	Omani	27.9 (2.7)	25.1 (1.7)	25.5 (2.9)	28.1 (2.0)	25.9 (2.3)	25.8 (3.2)	158.3 (11.1)
		non-Omani	-	-	-	-	-	-	-
D8	M1	Omani	‡	‡	‡	‡	‡	‡	‡
		non-Omani	30.4 (4.0)	30.7 (3.0)	30.5 (4.1)	32.0 (1.5)	30.4 (2.4)	28.3 (5.7)	182.5 (16.4)
	M2	Omani	30.2 (2.2)	27.8 (2.3)	28.0 (2.8)	29.7 (1.0)	28.6 (1.7)	28.0 (2.9)	172.4 (6.0)
		non-Omani	29.2 (1.2)	25.2 (1.6)	28.8 (1.8)	28.5 (1.2)	28.5 (2.6)	25.2 (3.3)	165.5 (6.1)
	F1	Omani	30.6 (1.8)	26.7 (2.3)	29.2 (1.7)	30.4 (2.1)	30.2 (2.1)	27.8 (2.4)	174.9 (10.3)
		non-Omani	31.0 (1.1)	27.7 (3.9)	27.2 (0.9)	29.5 (3.1)	28.0 (0.8)	26.7 (2.5)	170.2 (9.0)
	F2	Omani	30.7 (2.2)	26.5 (2.1)	27.1 (2.7)	28.7 (1.8)	27.3 (3.3)	25.8 (4.8)	166.3 (13.2)
		non-Omani	32.0 (0.8)	30.2 (3.1)	30.0 (2.0)	31.7 (1.5)	30.2 (2.6)	30.0 (2.1)	184.2 (9.6)
D9	M1	Omani	25.6 (0.8)	26.5 (4.9)	24.5 (2.1)	26.0 (0.7)	21.5 (6.3)	27.5 (2.1)	151.6 (15.7)
		non-Omani	29.2 (2.2)	27.1 (2.8)	28.0 (3.1)	29.3 (3.4)	28.8 (3.6)	25.1 (5.0)	167.8 (15.4)
	M2	Omani	25.3 (7.9)	26.2 (6.4)	25.2 (6.7)	25.6 (6.8)	26.9 (7.0)	21.8 (72)	151.2 (40.2)
		non-Omani	29.3 (2.0)	27.0 (3.3)	28.6 (1.8)	29.6 (2.9)	29.6 (1.4)	25.4 (1.5)	169.6 (9.4)
D9	F1	Omani	25.0 (-)	23.0 (-)	24.0 (-)	23.0 (-)	24.0 (-)	23.0 (-)	142.0 (-)
		non-Omani	§28.8 (3.7)	§28.6 (2.0)	§28.1 (3.6)	§28.9 (2.5)	§28.5 (3.6)	§28.2 (3.9)	§171.3 (17.5)
	F2	(All[a])	31.1 (3.2)	30.4 (2.8)	31.0 (3.9)	30.6 (2.9)	30.6 (2.5)	30.8 (3.6)	184.7 (17.1)
MEAN TOTAL[b]			29.6 (3.2)	27.4 (4.0)	28.4 (3.7)	29.0 (3.3)	28.3 (3.9)	27.0 (4.5)	169.9 (19.7)

[a]Demographic information from school D9-F2 is missing. These values are the means of all teachers at that school.

‡ mean totals are averaged over all variables.

Note. School codes are assigned M for male, F for female. Numbers are also assigned since each district has 2 schools for each gender.

Spearman's rho for Facilitive Leadership Analyses of Teachers' Responses

Leadership Factor	Means (±SD) By Leadership Role		rho	p[a]
	Teacher	Principal		
Accountability	29.6 (3.3)	27.8 (4.7)	0.43	.000
Collaboration	27.4 (4.0)	27.9 (5.2)	0.57	.000
Improvement	28.4 (3.7)	25.8 (5.0)	0.50	.000
Relationships	29.0 (3.3)	28.1 (4.5)	0.52	.000
Values	28.3 (3.9)	27.9 (4.7)	0.45	.000
Vision	27.0 (4.5)	26.3 (5.6)	0.46	.000
TOTAL	169.9 (19.6)	164.1 (27.5)	0.61	.000

[a]Probability of rho if no relationship exists between the two scores